Construction News

★Denotes work advertised in ENGINEERING NEWS.
✚Denotes contract awarded. The names of bidders awarded contracts are set in CAPITALS.

Important Railway Buying

The Pennsylvania R.R. has made two important announcements concerning equipment. On Apr. 17 it was stated that the company would buy about $20,000,000 of motive power and equipment and Apr. 19 another official notice was made of contemplated purchase which should amount to $7,000,000. The total inquiry amounts to 16,245 freight cars, 195 locomotives and 191 all steel passenger cars. A portion of this equipment will be built in the company's Altoona shops. This is the first important equipment order to be placed since the outbreak of the European war. The Chicago & Northwestern is in the market for 2000 freight cars and 50 passenger coaches, the Virginian for 500 steel under frames.

RAILWAYS

New York—Erie R.R.—According to press reports this company is settling all disputes with cities that have been holding up its plans for completing the final 49 miles of double-tracking between New York and Chicago, Ill. This work is divided into three sections: 35 miles from Griffith to Lamox, Ind.; nine miles from Waterloo to Sternberg, N. Y., and five miles from Allegany to Carrollton, N. Y. R. C. Falconer, New York, N. Y., is Supt. Const.

West Virginia—The Louisville & Nashville R.R.—This company is preparing to construct 23 miles of railway from McRoberts, the present terminus, to Elk Horn, thus connecting the two greatest coal fields in eastern Kentucky. W. H. Courtenay, Lousville, Ky., is Ch. Engr.

North Carolina—Bids will again be received by the County Commissioners for the construction of the proposed railway to connect Shelby and Casar, N. C., about 21 miles. Noted Mar. 25.

✚**North Carolina**—Carolina & Northwestern R.R.—This company has awarded the contract for grading and improving its lines in the vicinity of Newton, N. C., to J. W. POLK, Newton. Noted Apr. 1.

South Carolina—Furman & Yemassee R.R.—This company has been incorporated to construct a railroad from Furman to Yemassee, S. C., about 20 miles. J. H. Adams, W. O. Ellis and H. Weindal are interested.

Georgia—Shearwood Ry.—Plans are being considered by this company for the construction of a 4½-mile extension to its line from Brooklet, Ga. J. S. Baxter, Garnett, S. C., is Ch. Engr.

Kentucky—Illinois Central R.R.—Plans are being prepared by this company for the construction of a new line from Dawsonsprings to Providence, Ky. A. S. Baldwin, Chicago, Ill., is Ch. Engr.

✚**Ohio**—Chesapeake & Ohio Ry. Co. of Indiana—This company has awarded contracts for the construction of a 28-mile railway from Portsmouth to Waverly, Ohio, as follows: W. W. BOXLEY, Roanoke, Va., for constructing roadbed leading to the Kentucky abutment at Siloam, Ky.; RINEHART & DENNIS CO., Charlottesville, Va., for constructing the first 7¼ miles from Sciotoville to a point near Harrisonville; WINSTON & CO., Richmond, Va., for constructing the next eight miles to a point known as the Summit cut; ROBERT GRACE CONTRACTING CO., Pittsburgh, Penn., for constructing line from Summit cut to Waverly.

Montana—Chicago, Milwaukee & St. Paul Ry.—Announcement has been made that this company will soon start work on the regraveling of its entire roadbed from Deer Lodge to Haugan, Mont. C. F. Loweth, Chicago, Ill., is Ch. Engr.

Arkansas—Montant Ry.—This company was recently incorporated to construct a three-mile narrow gage railway from Montana, Ark., to the mines of the Johnson & King Mining Co. E. H. Johnson is interested.

✚**Washington**—Chicago, Milwaukee & St. Paul Ry.—This company has awarded to TWOHY BROS., Spokane, the contract for the construction of the 12 miles of new branch railway, which will tap the great Nooksack River timber belt, northeast of Bellingham. The line will be built from Goshen to Welcome, about 12 miles, and is estimated to cost about $400,000.

Washington—The Harvey Mill Co., Vancouver, Wash., has executed a mortgage to the Lumbermen's Trust Co., Portland, the proceeds to be used in the construction of a log railroad along Lewis River, where the company is acquiring large timber holdings.

Pacific Ry.—It is reported that this company plans the construction of a line to connect its tracks in Sumas, Wash., with the British Columbia Electric Ry., just across the border between the United States and British Columbia. It is stated the work of construction will begin early in May. W. L. Darling, St. Paul, Minn., is Ch. Engr.

Oregon—California & Oregon Coast R.R.—Twohy Bros., Spokane, Wash., railroad contractor, has arranged to finance and build a railroad from Wilderville, Ore., to Crescent City, Calif., about 81 miles. The estimated cost is $5,000,000.

Alaska—The route of the Alaska railroad to be built by the Government has been selected. The line will extend from Seward, on Resurrection Bay, to Fairbanks, about 471 miles. This will include the Alaska Northern road, already built, which will be bought by the Government. A branch line will be built from Matanuska Junction into the coal fields, about 38 miles. The estimated cost of the line, including the branch, is $26,800,000. The work will be in charge of the Alaskan Engineering Commission. Work will be started at once and about 40 miles of road will be completed this year. Noted June 18, 1914.

Alberta—Central Canada Ry.—The Alberta Legislature has adopted a resolution providing for a government loan, not exceeding $2,000,000, to this company, for the construction of the McLellan-Peace River Crossing line. This will insure the immediate construction of the line as the loan will be floated as soon as possible.

Alberta—Edmonton, Dunvegan & British Columbia Ry.—The Alberta Legislature has adopted a resolution to guarantee the branch line of this road from a point on the main line south to Grande Prairie, a distance not exceeding 60 miles, at $20,000 per mile.

ELECTRIC RAILWAYS

Bristol, Conn.—The Bristol & Plainville Tramway Co. is preparing plans for the extension of its lines in Bristol. C. E. Cockings, Bristol, is Mgr.

Albany, N. Y.—The United Traction Co. contemplates the construction of a loop at Grand St., Hamilton St., Trinity Pl. and Madison Ave. and to extend its Arbor Hill line. James F. Hamilton, Albany, is Gen. Mgr.

Amsterdam, N. Y.—The Fonda, Johnstown & Gloversville R.R. plans to improve its lines in Ft. Johnson and Amsterdam. W. H. Collins, Gloversville, is Gen. Mgr.

Buffalo, N. Y.—The International Ry. Co. has received an extension of time on its franchise to construct tracks in East Delavan and West Delavan Ave. J. C. Sheldon, Buffalo, is Pur. Agt.

Jersey City, N. J.—The bill, providing for a municipal railway in Jersey City in the downtown section to develop manufacturing, passed the State Assembly, Apr. 13. Noted Apr. 1.

Easton, Penn.—The Northampton, Easton & Washington Traction Co. has asked permission of City Council to lay a new switch and reconstruct its track with new and heavier rails on North Fourth St. between Church and Northampton St. W. O. Hay, Easton, is Gen. Mgr. and Pur. Agt.

Erie, Penn.—The City Council has granted a franchise to the Buffalo & Lake Erie Traction Co. to double-track its line on East Sixth St. and to construct a new line on West 17th St. A. R. Myers, Erie, is Gen. Mgr.

Erie, Penn.—The Erie & Southwestern Ry. Co. was recently organized to construct an electric railway to connect Erie, Sterretania, Platea, Cranesville, Albion, Springboro, Conneautville and Exposition Park to Conneaut Lake, about 40 miles. Surveys for the line have been made. H. C. Allen, Erie, is interested.

McConnellsburg, Penn.—Bids are now being received for the construction of the line between McConnellsburg and Fort London by the McConnellsburg and Fort London Ry. Co. A. Spotwood Dandridge is Engr.

Washington, D. C.—The Capital Traction Co. plans to construct an extension from 17th and U St. N. W. south on 17th St. to I St.; thence to 13th St.; thence to H St., and thence to Seventh St. It also proposes short links of track on 15th St. and on 18th St. and a loop at the intersection of Seventh St., Louisiana Ave. and C St. N. W. J. H. Hanna, Washington, is Ch. Engr.

Wilmington, Del.—The Wilmington & Philadelphia Traction Co. has applied to the City Council for an extension of time on its franchise to construct the proposed Washington St. and Boulevard extension in Wilmington. R. W. Crook, Wilmington, is Gen. Mgr. and Pur. Agt.

Hodgenville, Ky.—The citizens of Green and La Rue Counties contemplate the construction of an electric railway to connect Greensburg and Hodgenville. A. H. Benningfield, Taylorsville, is interested.

Chardon, Ohio—The Chardon, Jefferson & Meadville Interurban Ry. Co. plans to construct an electric railway to connect Chardon, Hampton, Rock Creek and Jefferson, a distance of about 30 miles. F. A. Pease, Cleveland, is Engr.

Cleveland, Ohio—The Cleveland Ry. Co. contemplates the extension of its Madison Ave. line from 117th St. to Rocky River. George L. Radcliffe, Cleveland, is Gen. Mgr.

Crystal, Mich.—The City Council has granted a franchise to the Muskegon-Saginaw Electric Co. to construct an electric railway through Crystal. This is part of a plan to build an electric line to connect Muskegon, Casnovia, Crystal, Egelston, Moorland and Saginaw.

Detroit, Mich.—The Detroit, Lansing & Grand Rapids Ry. Co. has completed surveys and will soon start work on the construction of an electric railway from Detroit to Lansing. Henry M. M. Wallace is Pres.

Madison, Wis.—The Janesville & Madison Traction Co. contemplates the construction of about one mile of new track in Madison. G. Pickhardt, 409 Washington Bldg., Madison, is Pres.

Whitewater, Wis.—The Badger Ry. & Light Co. is making surveys for the construction of an electric railway from Whitewater to Lake Geneva with a branch to Ft. Atkinson and Jefferson. H. B. Kamschulte, Milwaukee, is Pres. and Gen. Mgr.

Little Falls, Minn.—The Minneapolis & Central Minnesota Ry. Co. contemplates the construction of an electric railway from Little Falls to Pierz. B. H. Bradley is Ch. Engr.

Wichita, Kan.—The Arkansas Valley Interurban Ry. Co. has applied to the City Council for a franchise to construct an electric railway from 21st St. west to Mascot and north to the city limits. Charles D. Bell, Wichita, is Pur. Agt. and Ch. Engr.

Hot Springs, Ark.—The Mountain Valley Water Co. has completed surveys for the construction of the proposed electric railway from Hot Springs to Mountain Valley.

Dallas, Tex.—The Dallas Northwestern Traction Co. and the Dallas Southwestern Traction Co., which are affiliated concerns, have petitioned the City Commission to grant an extension of their respective franchises for a period of six months. The two companies propose to construct interurban lines out of Dallas to Denton on the north and Glen Rose on the south.

Galveston, Tex.—The City Council has granted a franchise to the Galveston, Houston & Henderson R.R. Co. to extend its line on Church St. J. H. Hill, Galveston, is Vice-Pres. and Gen. Mgr.

Oklahoma, Okla.—John R. Rose, who is interested in the Oklahoma Interstate Ry. Co., plans to extend the interurban line from Miami to Afton via Vinita to Centralia.

LIGHT, HEAT AND POWER

Salem, Mass.—It is reported that work will soon be begun on enlarging and improving the plant of the Salem Electric Lighting Co. at an estimated cost of $250,000. The work includes an addition to the power station, and the installation of a 6250-kw. generator, four 750-hp. Bigelow-Hornsby water-tube boilers, furnaces and stokers. The wires in the business district will also be placed underground. Noted Jan. 14.

†Minetto, N. Y.—The Columbia Power Co. has awarded the contract for the construction of its power plant in Minetto to the WITHERSPOON & ENGLAR CO., Chicago, Ill. The plant will be located north of the bulkheads of the new dam, and will have an output of 12,000 hp.

†New York, N. Y.—(Borough of Manhattan)—Bids were received Apr. 7 by the Board of Trustees, Bellevue and Allied Hospitals, for gas and electric-light fixtures in the main building and ward wing extension to the Harlem Hospital from: J. M. Knopp, $7700; Carbondale Machine Co., $8165; SHIPLEY CONSTRUCTION & SUPPLY CO., Columbia St., Brooklyn, $7250 (awarded contract).

Perth Amboy, N. J.—(Official)—Bids will be received until 8:30 p.m., Apr. 26, by the Board of Aldermen for the construction of a municipal electric-light plant. The work includes construction of a power station building, traveling crane, oil engines, generators, switchboards, transformers, pumps, heating apparatus, wiring and electric lights in the building, and outside distributing system, overhead and underground construction. Runyon & Carey, 845 Broad St., Newark, is Engr.-in-Charge. Wilbur La Roe is City Clk. Noted Nov. 19, Jan. 21 and Mar. 25.

New Brighton, Penn.—The Borough Council is considering the establishment of a municipal electric-light plant. A special committee has been appointed to ascertain the approximate cost of a plant.

Philadelphia, Penn.—George S. Idell, Arch., 34 South 16th St., Philadelphia, has plans and specifications on file for the installation of a power plant at the Pennsylvania Village for Feeble-Minded Women, Union County. Bids for the work are now being received by the Board of Managers of the institution.

†Reading, Penn.—Joseph Bancroft & Sons Co., manufacturer of cotton goods, has awarded the contract for the construction of a one-story, 26x42-ft. brick boiler house to L. H. FOCHT & SON, Reading. It will cost about $5000.

Wampum, Penn.—It is reported that the Pennsylvania Power Co., Ellwood City, Penn., is considering the purchase of the municipal electric-light plant at Wampum. The former company has always supplied energy to operate the Wampum plant. M. V. Knapp is Gen. Mgr. and Cont. Agt.

Waynesville, N. C.—An election will be held May 4, at which the citizens will vote on the question of issuing $25,000 in bonds for the purpose of establishing a municipal electric-light plant.

Oxford, Ohio—The Trustees of Miami University, Oxford, plan to double the capacity of the power plant. Additional boilers and engines will be required. Walter G. Franz, Union Trust Bldg., Cincinnati, is Consult. Engr.

Cincinnati, Ohio—P. A. Henry, 713 Sycamore St., has commissioned Zettel & Rapp, Arch., 607 Johnston Bldg., to prepare plans for a six-story, reinforced-concrete power building at the southwest corner of Eighth St. and Broadway. The estimated cost is $125,000.

Clare, Mich.—At a recent election, the question of issuing $34,000 in bonds for the purpose of building a municipal electric-light plant was defeated.

Centerville, Iowa—Press reports state that the Centerville Light & Traction Co. is preparing to build a transmission line to Cincinnati, a distance of nine miles. It will furnish power for mines along the route, and for residences and street-lighting in the village of Cincinnati. Harry Longanecker, Centerville, is Supt. of the Centerville Light & Traction Co.

Iowa Falls, Iowa—A company has been formed in Iowa Falls, with a capital stock of $200,000, for the purpose of installing and operating a new heating and lighting system. John A. Reed, Cedar Rapids, is interested.

Orchard, Iowa—Press reports state that a company has secured options on sites along the Cedar River to be used for the construction of a hydro-electric plant at Orchard. The company plans to ultimately furnish power throughout several counties in northern Iowa and southern Minnesota.

Broken Bow, Neb.—At the election held Apr. 9, the citizens voted in favor of issuing $10,000 in bonds to be used for the installation of an electric-lighting system. Noted Apr. 1.

Nelson, Neb.—Bids will be received until noon, Apr. 30, by W. A. McHenry, City Clk., for furnishing all materials for an electric distribution system, and for labor to complete the system.

Gillette, Wyo.—Plans have been prepared by Royal L. Salisbury, Newcastle, Wyo., for the construction of an electric-light plant in Gillette.

St. Louis, Mo.—It is reported that the question of establishing a municipal electric-light plant for this city is being agitated. James A. Hooke is Dir. of Pub. Utilities.

Prairie Grove, Ark.—The Prairie Grove Electric Co. has been organized with a capital stock of $6000 for the purpose of equipping and operating an electric-light plant.

Aransas Pass, Tex.—The City Council is reported to be considering the improvement of the municipal electric-light plant and water-works system at an estimated cost of $35,000.

McKinney, Tex.—It is reported that the city will purchase, some time this year for the municipal electric-light plant, a 200-kw., two-phase, 60-cycle, 2300-volt generating unit, directly connected. W. E. McKinnon is Supt. of the plant.

Plainview, Tex.—It is reported that the Malone Light & Ice Co., Plainview, has recently purchased the properties of the Lockney Electric Light Co., Lockney, and the Lubbock Light & Ice Co., Lubbock. Both plants will be enlarged and improved. Charles A. Malone, Plainview, is Secy. and Mgr. of the Malone Light & Ice Co.

Waco, Tex.—It is reported that the Texas Power & Light Co., Dallas, will construct a transmission line from its central station at Waco to connect Taylor, Thrall, Rockdale and Cameron. F. R. Slater, Dallas, is Gen. Supt.

†Seattle, Wash.—The Gas Service Corporation of America has awarded the contract for the construction of two gas plants, one at Montesano, and the other at Bremerton, to the BURNETT CONSTRUCTION CO., at $150,000 for the two. Noted Feb. 25 under Montesano, Wash.

Bakersfield, Calif.—The Lakeview Oil Co. No. 1 will purchase an electric generating plant, five 70-hp. boilers, lathes and other equipment for a power house and machine shops it plans to install. W. J. Burnhart is Supt.

Merced Falls, Calif.—It is reported that the San Joaquin Light & Power Co., Fresno, will install a new unit at Merced Falls to cost about $75,000. The voltage of the transmission line from Merced Falls to Merced will be increased from 30,000 to 60,000 volts. A. G. Wishon, Fresno, is Gen. Mgr. of the San Joaquin Light & Power Co.

Blenheim, Ont.—The Town Council plans the installation of a new hydro-electric system for lighting and other purposes. The estimated cost is $40,000. It is reported that construction work will be begun soon. W. R. Fellows is Mayor.

Dutton, Ont.—The Hydro-Electric Commission will start work at once on the installation of an electric-lighting system. The Commission will purchase all material. The estimated cost is $10,000. Noted Feb. 18.

Rodney, Ont.—It is reported that the Town Council plans the installation of a hydro-electric plant to furnish light and power to the town. The estimated cost is $25,000. B. B. Graham is Reeve.

Kamloops, B. C.—The Municipal Council is having plans prepared by DuCane, Dutcher & Co., 470 Granville St., Vancouver, for extensions to the electric-lighting system at an estimated cost of $50,000. J. J. Carment is Clk. Noted Jan. 7.

BRIDGES

Springfield, Mass.—It is reported that the City of Springfield has petitioned the State Legislature for authority to build a bridge across the Connecticut River to West Springfield. F. H. Clark is City Engr.

†West Groton, Mass.—(Official)—The Towns of Shirley and Groton have awarded the contract for the construction of a bridge over the Squannacook River at West Groton to the BEAVER CONTRACTING & ENGINEERING CORPORATION, 113 State St., Boston. Burtis S. Brown, 88 Broad St., Boston, is Engr. Noted Mar. 11.

Providence, R. I.—It is reported that the Department of Public Works is considering the construction of a bridge over the Providence River at Market Sq. between Washington Row and Canal St. The estimated cost is $76,360. O. F. Clapp is City Engr.

Hartford, Conn.—It is reported that the City Council plans to build a new bridge over the Park River at the foot of Trumbull St. The estimated cost is $9500. Roscoe N. Clark is City Engr.

★Cobleskill, N. Y.—(Official)—Bids will be received until 1 p.m., May 3, by Lorenzo J. Gordon, Supt. of Highways of the Town of Cobleskill, for the construction of a bridge over Cobleskill Creek. Ogden Eldredge is Town Clk.

Lancaster, N. Y.—Bids will be received until 2 p.m., May 3, by F. H. Maute, Town Clk., for the construction of a reinforced-concrete arch over Cayuga Creek. George C. Diehl, 575 Ellicott Sq., Buffalo, is Engr.

Bloomingdale, N. J.—The Boards of Chosen Freeholders of Morris County, Morristown, and Passaic County, Paterson, plan to build a new bridge over the Pequannock River between Bloomingdale and Butler. It will be of concrete, 42 ft. wide with a 30-ft. roadway.

★†Camden, N. J.—(Official)—Bids were received Apr. 12 by the Board of Chosen Freeholders of Camden County for the construction of two reinforced-concrete bridges on Kings Highway, (A) Cooper River Bridge, (B) North Branch Cooper River Bridge. The bids follow: REESE, TAYLOR & CO., INC., Trenton, (A) $11,989, (B) $7418 (awarded contract); C. A. HENNESSEY, Burlington, (A) $7825 (awarded contract); H. Denburger, (A) $14,284, (B) $11,495; Ferro-Concrete Co., (A) $9974, (B) $7777; W. H. Johnson, Jr., (A) $11,895, (B) $8797; C. T. Eastburn Co., (A) $10,750, (B) $7900; Bridgeton Construction Co., (A) $11,211, (B) $8293; Whitaker & Diehl, (A) $9674, (B) $7546; Sparks & Evans, (A) $9495, (B) $7845; J. E. Brenneman, (A) $10,734, (B) $7898; Pugh, Hubbard Co., (A) $9947, (B) $8111; Kelley-McFeeley Co., (A) $10,650, (B) $8483. Noted Mar. 18.

Collingswood, N. J.—The Board of Chosen Freeholders of Camden County, Camden, is reported to be considering the construction of a bridge to connect Swan Ave., Collingswood, with Elm Ave., Woodlyn, Penn.

★Elizabeth, N. J.—(Official)—Bids will be received until 2 p.m., May 5, by the Board of Chosen Freeholders of Union County for the construction of a steel lift bridge over the Elizabeth River at Baltic St. and Trenton Ave., Elizabeth. Plans were prepared by the Strauss Bascule Bridge Co., 104 South Michigan Ave., Chicago, Ill. Jacob L. Bauer is County Engr. of Union County. Noted May 14, 1914, and Apr. 1, 1915.

Sea Isle City, N. J.—Bids will be received until noon, May 4, by Frank W. Fowkes, Clk. Bd. of Chosen Freeholders of Cape May County, Cape May C. H., for the construction of a Strauss type double-lift bridge on concrete piling, at Sea Isle City. L. M. Rice, Wildwood, is County Engr.

Easton, Penn.—Bids will be received until 11 a.m., May 14, by the Board of Commissioners of Northampton County for the construction of a reinforced-concrete bridge over Bushkill Creek, Bushkill Township. George F. P. Young is County Controller.

✚Franklin, Penn.—(Official)—The Board of Commissioners of Venango County has awarded contracts for bridge construction as follows: White Bridge over Oil Creek to the HORSEHEADS CONSTRUCTION CO., Horseheads, N. Y., at $3257; Utica Bridge to J. G. SHAFFER, Oil City, at $3499; Shippen Bridge to the PENN BRIDGE CO., Beaver Falls, at $3063. Noted Apr. 8.

Hollidaysburg, Penn.—(Official)—Bids will be received until May 7 by the Board of Commissioners of Blair County for the construction of eight county bridges, and for placing a creosoted block floor on one bridge. H. G. Hinkle, Altoona, is County Engr. W. S. Hostler is Clk. of Comrs. Noted Mar. 18.

★Philadelphia, Penn.—(Official)—Bids will be received until noon, Apr. 29, by M. L. Cooke, Dir., Dept. of Pub. Wks., Room 216 City Hall, for the construction of a bridge on the line of 58th St., over the tracks of the Philadelphia & Baltimore Central R.R.

Reading, Penn.—(Official)—Bids will be received until 10 a.m., Apr. 26, by D. K. Hoch, Controller of Berks County, for the construction of a reinforced-concrete bridge across Willow Creek in Richmond Township, to be known as the Fleetwood Bridge.

✚Reading, Penn.—(Official)—The Commissioners of Berks County have awarded the contract for the construction of a reinforced-concrete slab bridge over Hay Creek at White Bear, Robeson Township, to L. H. FOCHT, Second National Bank Bldg., Reading. Five other bids were received. Noted Apr. 8.

Reading, Penn.—It is reported that engineers of the Philadelphia & Reading Ry. are preparing plans for rebuilding the Center Ave., the Fourth St. and the Schuylkill Ave. Bridges over the Lebanon Valley tracks. Plans for the Sixth St. Bridge have been completed. The estimated cost of the work proposed is $100,000. C. Dillenback, Philadelphia, is Ch. Engr.

★Cumberland, Md.—(Official)—Bids will be received until 9:30 a.m., May 3, by the Mayor and City Council for the construction of a two-span reinforced-concrete arch over Wills Creek, at Market St., Cumberland. Plans were prepared by B. H. Davis, Whitehall Bldg., New York, N. Y. James P. Gaffney is City Engr.

Hillsville, Va.—(Official)—Bids will be received until noon, Apr. 30, by the Clerk of the Circuit Court of Carroll County for the construction of a 119-ft. steel bridge over Crooked Creek. The substructure will be of concrete. G. P. Coleman, Richmond, is State Highway Comr.

Jasper, Ala.—Bids will be received until May 10 by the Board of Commissioners of Walker County for the construction of four steel bridges across the Black Warrior River, at or near Cordova, Sipsey Fork, Mulberry River and Town Creek. Charles M. Sartain, Jasper, is Judge of Probate and Chn. of Comrs. Noted Mar. 4 and 25.

★✚Lake Charles, La.—The Police Jury of Calcasieu Parish has awarded the contract for the construction of a steel swing bridge over Black Bayou on Highway No. 4 to the VINCENNES BRIDGE CO., Vincennes, Ind., at $6396. Noted Mar. 11.

Nashville, Tenn.—(Official)—The State Legislature has authorized Davidson County to issue $250,000 in bonds for the construction of a bridge over the Cumberland River at Hydes Ferry. A special committee of the Davidson County Court has engaged F. E. Freeland, of the Freeland-Klyce Engineering Co., 65 Life & Casualty Bldg., Nashville, to prepare plans and estimates of the cost of constructing this bridge.

Henderson, Ky.—It is reported that the Fiscal Court of Henderson County has authorized the construction of a number of bridges on the principal roads of the county.

✚Canton, Ohio—(Official)—The Board of Commissioners of Stark County opened bids Apr. 14 for the construction of the James Steele Bridge on the Massillon-Millersburg Rd. in Tuscarawas Township, as follows: Hill & Hill, Elyria, $5834; F. E. HEISLER, Massillon, $5051 (awarded contract); Philip Dieffenbacher & Sons, Massillon, $5059; George W. Luke, Canton, $5523; Matthew Miller, Canton, $5934; Hahn Bros., Canton, $5938; A. E. Limbach, Minerva, $5286; Illinois Bridge Co., Chicago, $5698; Daley Bros. Construction Co., Bolivar, Ohio, $5529; S. C. Kissner & Sons, Delaware, Ohio, $5892. The Engineer's estimate was $6235. C. L. Stoner is Clk. of Comrs. Noted Mar. 25.

Canton, Ohio—The Board of Commissioners of Stark County has approved the plans for rebuilding the bridge at Tuscarawas St., W., and will shortly advertise for bids for construction. C. L. Stoner is Clk. of Comrs. Noted Sept. 3, 1914.

Cincinnati, Ohio—(Official)—Bids will be received until noon, May 7, by the Board of Commissioners of Hamilton County, for the construction of a culvert on Given Rd., near the residence of Raper Moore in Columbia Township. Albert Reinhardt is Clk. of Comrs.

Lima, Ohio—It is reported that the Board of Commissioners of Allen County will soon advertise for bids for constructing the Ford Bridge in Marion Township. It will be of concrete, four 50-ft. spans. H. J. Lawrence is County Clk.

Bloomington, Ind.—(Official)—Bids will be received until 2 p.m., May 3, by the Commissioners of Greene County for the construction of five bridges. George E. Kidd is County Audr.

Crawfordsville, Ind.—(Official)—Bids will be received until 10 a.m., May 4, by the Board of Commissioners of Montgomery County for the construction of three small bridges and the repair of three others. M. L. Nees is County Surv. Noted Mar. 25.

Dayton, Ind.—Bids will be received until May 5 by the Commissioners of Tippecanoe County, LaFayette, for the construction of a steel or reinforced-concrete bridge at Sycamore Crossing, near Dayton. The estimated cost is $4000. G. W. Baxter is County Audr. Noted Apr. 1.

✚Evansville, Ind.—The Board of Commissioners of Vanderburg County has awarded the contract for the construction of five bridges to the VINCENNES BRIDGE CO., Vincennes, at $9488, and a contract for two bridges to the PRITCHARD BRIDGE CO. at $2800. Bids were received Apr. 9. Noted Apr. 1.

Rensselaer, Ind.—(Official)—Bids will be received until 2 p.m., May 4, by the Commissioners of Jasper County for the construction and repair of a number of bridges. J. P. Hammond is Audr.

Rochester, Ind.—Press reports state that the Board of Commissioners of Fulton County has decided to build a bridge across the Tippecanoe River on the Michigan Rd., north of Rochester.

Salem, Ind.—Bids will be received until 1:30 p.m., May 4, by the Commissioners of Washington County for the construction of a number of bridges. Ira H. Rutherford is County Audr.

Winamac, Ind.—(Official)—Bids will be received until May 4 by the Board of Commissioners of Pulaski County for the construction of 13 bridges, ranging from 6 to 50 ft. in length. The total cost will be about $9000. C. E. Paul is County Surv.

✚Bloomington, Ill.—(Official)—The State Highway Commission has awarded the contract for the construction of a county line bridge between Rutledge Township, DeWitt County, and Empire Township, McLean County, to the ROCK RIVER BRIDGE CO., Oregon, Ill., at $4000. Eight other bids were received. The Engineer's estimate was $4650. Noted Apr. 1.

✚Custer Park, Ill.—(Official)—The Highway Commission of Will County has awarded the contract for the construction of four small bridges in Custer Township to WILLIAM POHL, Braidwood, Ill. Noted Mar. 25.

Woodstock, Ill.—Bids will be received until 11 a.m., Apr. 24, by the Town Clerk for the construction of a steel or reinforced-concrete bridge in Nunda Township. The estimated cost is $15,300. Plans on file with C. L. Tryon, Woodstock, County Supt. of Highways of McHenry County.

Beloit, Wis.—(Official)—We are advised by W. S. Hubbard, Ch. Engr. of the Rockford & Interurban Ry. Co., Rockford, Ill., that the bridge to be built just north of Beloit, will be constructed by the company's own forces. The estimated cost is $12,000. Noted Apr. 8.

Ft. Dodge, Iowa—(Official)—Bids will be received until 2 p.m., May 5, by J. L. Hanrahan, Audr. of Webster County, for the construction of 20 bridges and culverts. The estimated total cost is $27,616. G. P. Smith is County Engr.

Manchester, Iowa—(Official)—Bids will be received until noon, Apr. 24, by C. H. Bunker, Audr. of Delaware County, for the construction of 24 bridges and culverts. The county will furnish all cement. The estimated total cost is $11,500. Henry Klaus is County Engr. Noted Apr. 1.

Austin, Minn.—(Official)—Bids will be received until 4 p.m., Apr. 29, by O. J. Simmons, Audr. of Mower County, for the construction of 14 reinforced-concrete bridges, ranging from 24 ft. to 50 ft. long. A. C. White is Engr.

Duluth, Minn.—It is reported that bids will be received about Apr. 27 by D. A. Reed, Mgr. of the Light and Water Dept., for the construction of a concrete bridge over Tischer's Creek at First St. The estimated cost is $10,000.

✚Anthony, Kan.—The Board of Commissioners of Harper County has awarded the contract for the construction of a 300-ft. bridge over Bluff Creek to the WILLIAM McELROY CONSTRUCTION CO., Fort Scott, at about $9000.

Bloomington, Neb.—Bids will be received until noon, Apr. 30, by O. Muckle, County Clk. of Franklin County, for the construction and repair of all county bridges for a period of one year from date of contract.

Hartington, Neb.—The Commercial Club of Hartington is considering the matter of building a bridge over the Missouri River to connect Cedar County, Neb., with the City of Yankton, S. D. The bridge would cost approximately $800,000, and press reports state that Yankton has already raised $380,000 toward the project.

Ord, Neb.—Bids will be received until noon, May 4, by William A. Bartlett, Clk. of Valley County, for the construction of a number of bridges.

✚Cavalier, N. D.—(Official)—The Commissioners of Pembina County have awarded the contract for the construction of seven bridges to the FARGO BRIDGE & IRON CO., Fargo, N. D., at $5250. Noted Mar. 11.

✚St. Louis, Mo.—Press reports state that the Board of Public Service has awarded the contract for about 150,000 lin.ft. of concrete piling for completing the Free Bridge across the Mississippi River to JOHN LUND, at 83c. per lin.ft. Noted Apr. 1.

Alamosa, Colo.—Bids will be received until May 3 by the Board of Commissioners of Alamosa County for repairs to the concrete bridge over the Rio Grande River at the foot of Fourth St., Alamosa. Robert Ginn is Clk. of Comrs.

Artesia, N. M.—The Commissioners of Eddy County, Carlsbad, have instructed James A. French, State Engr., Santa Fe, to prepare plans for a 250-ft. steel bridge over the Pecos River, three miles north of Artesia.

✝San Marcial, N. M.—The Board of Commissioners of Socorro County, Socorro, has awarded the contract for the construction of a bridge across the Rio Grande River at San Marcial to the MIDLAND BRIDGE CO., Kansas City, Mo. Noted Oct. 29 and Mar. 18.

Everett, Wash.—Bids will be received until Apr. 26 by Hans Mumm, Jr., Engr. of Snohomish County, for the construction of a new concrete bridge on the site of present Bridge No. 332.

✝Hoquiam, Wash.—The Board of Public Works has awarded the contract for repairs to the trusses, machinery and piers of the Eighth St. Bridge to McCRARY & WILLARD, Spokane, at $7567. C. E. Fowler, Central Bldg., Seattle, is Engr. Noted Mar. 25.

Malaga, Wash.—(Official)—We are advised by A. H. Hogeland, Ch. Engr. of the Great Northern Ry., that no plans have been prepared for a $300,000 bridge across the Columbia River at Malaga, and nothing will be done for some time to come. Noted Apr. 8.

✝Port Orchard, Wash.—(Official)—The Commissioners of Kitsap County have awarded the contract for the construction of two wooden bridges at Silverdale and South Colby to SCHOLD & BOUGHTON, Silverdale, and JARVIS & GARVEY respectively. R. E. Gordon is County Audr. Noted Apr. 1.

Tacoma, Wash.—(Official)—Bids will be received until 11 a.m., May 1, by the Board of Commissioners of Pierce County for the construction of Bridge No. 18195A across South Prairie Creek. It will consist of a frame trestle, 145 ft. long, and a 60-ft. steel span on concrete piers. Henry C. Hitt is Bridge Engr. J. W. Slayden is Chn. of the Bd. Noted Apr. 8 under South Prairie, Wash.

✝Colusa, Calif.—(Official)—Bids were received Apr. 6 by the Board of Supervisors of Colusa County for the construction of 37 bridges, (A) "Prize Trough" Bridge, (B) "Maxwell Trough" Bridge, (C) 35 small bridges. The bids were as follows: DUNCAN-HARRELSON CO., 1405 Chronicle Bldg., San Francisco, (A) $33,745 (awarded contract), (B) $8996, (C) $28,988 (awarded contract); C. E. COTTON, 540 32nd St., Oakland, (A) $39,396, (B) $7840 (awarded contract), (C) $37,664; R. W. Moller, (A) $43,459, (B) $8603, (C) $41,859; Construction & Engineering Co., (A) $43,380, (B) $9780, (C) $38,027; Foster-Vogt Co., (A) $40,875, (B) $11,500, (C) $39,643. J. W. Kaerth is County Surv. Noted Mar. 18.

Holtville, Calif.—(Official)—The Board of Supervisors of Imperial County, El Centro, has rejected all bids received Apr. 12 for the construction of a reinforced-concrete bridge over the Alamo River on the extension of Sixth St., Holtville. The Board plans to build the bridge with its own forces. M. S. Cook is Clk. of the Bd. Noted Mar. 25.

✝San Francisco, Calif.—The Board of Public Works has awarded the contract for repairing the Third St. Bridge to MONSON BROS., 1907 Bryant St., San Francisco, at $6780.

Victoria, B. C.—The City Council is having plans prepared for the construction of a swing span bridge to replace the present Rock Bay Bridge. The estimated cost is $7500. C. H. Rust is Engr.

WATER SUPPLY—IRRIGATION

Boston, Mass.—The following bids were received Apr. 16 by the Metropolitan Water and Sewerage Board for a masonry tower on Bellevue Hill: John Cashman & Sons Co., 247 Atlantic Ave., Boston, $46,000; Coleman Bros., Boston, $48,900; C. A. Dodge Co., Erie and Albany St., Cambridge, $52,757; William Crane, Hayward and Amherst St., Cambridge, $54,590; John A. Rooney, 319 Washington St., Boston, $54,735; H. P. Converse & Co., 88 Broad St., Boston, $56,184; John F. Griffin Co., 17 Milk St., Boston, $61,798; Norcross Bros. Co., Worcester, $63,350; A. Piotti, 38 Olney St., Dorchester, $70,314; J. J. Prindiville Co., Framingham, $71,674, and J. E. Locatelli Co., Inc., 46 Cornhill St., Boston, $73,995. Dexter Brackett, 1 Ashburton Pl., is Ch. Engr. Noted Apr. 8.

✝Middleboro, Mass.—The contract has been awarded to the HENNEBIGNE CONSTRUCTION CO., New York, N. Y., at $23,140, for constructing a 500,000-gal, concrete tank on a concrete tower. Noted Feb. 18 and Mar. 18.

Newton, Mass.—Bids will soon be received by the Metropolitan Water and Sewerage Board for laying 8000 ft. of 60-in. water pipe in Newton. Dexter Brackett, 1 Ashburton Pl., Boston, is Ch. Engr.

Shrewsbury, Mass.—(Official)—Bids will be received until 2 p.m., Apr. 24, by R. E. Allen, Chn. of Water Comrs., for constructing a complete water system. Noted Feb. 11.

Worcester, Mass.—G. M. Wright, Mayor, favors continuing the construction of the Asnebumskit water supply system. The finishing of the dam and other work will cost $300,000. Mayor Wright favors an expenditure of $75,000 a year until completed.

Albany, N. Y.—The Council contemplates spending $100,000 for the extension of the water system and elimination of the old water mains. David E. Pugh is City Clk.

Brocton, N. Y.—Bonds for $20,000 have been sold, the proceeds of which will be used for the construction of a water system. H. M. Flemming is Clk. Noted Apr. 1.

Gates, N. Y.—(Official)—Bids will be received until 8 p.m., Apr. 27, by R. B. Wilson, Chn. Water Comrs., German Insurance Bldg., Rochester, for constructing a water system. Noted Apr. 8.

Gilbertsville, N. Y.—The village has been granted permission by the State Conservation Commission to construct an additional water system.

Harriman, N. Y.—Press reports state that plans have been prepared by Knight & Bush, Monroe, for the construction of a water system, estimated to cost $60,000.

★New York, N. Y.—(Official)—Bids will be received until 11 a.m., May 4, by the Board of Water Supply, Municipal Bldg., for Contract 143 for constructing 15 miles of wire fence with concrete posts and concrete and wood guard rails at the Ashokan reservoir in Olive, Marbletown and Hurley.

✝New York, N. Y.—(Official)—Bids were received Apr. 1 by the Board of Water Supply, Municipal Bldg., for constructing eight miles of guard walls at the Ashokan reservoir and for about five miles of road construction as follows: WINSTON & CO., 290 Broadway, New York, N. Y., at $189,150 (awarded contract); A. L. Guidone & Co., $223,975; Louis Wechsler, $392,000; State Highway Construction Co., $248,460; Frawley Kaufman Contracting Co., $221,110; H. P. Sproul, $221,950; Harris Rose Construction Co., $200,550; Conners Bros. Co., $256,870; Daniel F. Dunn, $237,470; Continental Public Works, $296,620; Nardone Petrillo & James Garafagno Co., $216,306; Ward & Tully, Inc., $253,185, and De Graff & Hogenbloom & Zadoc Boice, $240,090. Noted Apr. 1.

New York, N. Y.—(Borough of Bronx)—(Official)—Bids were received Apr. 14 by the Department of Water, Gas and Electricity for laying water mains in Bailey, Cedar and Sedgwick Ave., East 184th and East 225th St., Fordham and Kingsbridge Rd. and Harlem River Terrace as follows: Knight & DiMicco, $16,314; Rogers & McManus, $21,170; Soraci Contracting Co., $19,700; Beaver Engineering Co., $17,887; James McAvoy, $18,900; Louis D. Gregory, $16,714; C. Coppetto, $18,311; Brady Oltarsch, $21,132; Wilton Contracting Co., $18,058; Burnside Contracting Co., $18,944; Hanover Contracting Co., $18,979, and Melrose Construction Co., $6,565. Noted Apr. 8.

Watervliet, N. Y.—The Solomon-Norcross-Keis Co., Candler Bldg., Atlanta, Ga. and Watervliet, has been retained to prepare plans for the construction of a water system. Bonds for $625,000 have been authorized. Noted Mar. 11 and 18 and Apr. 1.

Plainfield, N. J.—The Plainfield-Union Water Co. has been granted permission by the State Public Utilities Commission to issue bonds for $100,000, part of which will be used for the improvement and extension of the water system.

Conyesville, Penn.—The city contemplates constructing a water-works on Rock Run at an estimated cost of $185,000.

Lancaster, Penn.—Bonds for $125,000 have been voted by the citizens, the proceeds of which will be used for new pumps and boilers for the water-works. I. Carpenter is City Engr. Noted Feb. 18.

Galax, Va.—The city plans to construct a water system. D. A. Robertson is Mayor.

✝Kannapolis, N. C.—The contract has been awarded to T. C. THOMPSON & BROS., Charlotte, by the Cannon Mfg. Co. to construct a filtration plant.

Morganton, N. C.—The construction of a water system for the State Hospital is under consideration. The State Legislature appropriated $60,000 for its construction.

Walterboro, S. C.—Bids will be received until May 14 for constructing a water system, the estimated cost of which is $18,000. H. W. Black, Jr., is Chn. Bd. of Comrs. Noted May 28 and July 30, 1914, and Feb. 18, 1915.

Rome, Ga.—William T. HcCormick, Engr., 12 Third Ave., has been retained to design a mechanical gravity filtration plant for Anchor Duck Mills. C. E. McLin is Pres.

Jacksonville, Fla.—About 500 water meters will be purchased by the Water Department.

Port Richey, Fla.—According to press reports, S. Wessilius, Grand Rapids, Mich., contemplates constructing a water system.

Northport, Ala.—An election will be held May 17 to vote on the question of issuing $16,000 in bonds, the proceeds of which will be used for the construction of water and sewer systems. C. P. Bell is Mayor.

✝Notasulga, Ala.—The contract has been awarded to B. F. ROBERTS, Macon, Ga., at $10,474, for constructing a water system. Bids were opened Mar. 2. Noted Feb. 25 and Mar. 18.

Whitecastle, La.—The construction of a water system and electric-light plant is under consideration by the city. S. M. Levy is Chn. of Com.

Henderson, Tenn.—An election will be held to vote on the question of issuing bonds, the proceeds of which will be used for the construction of a water system.

Ansonia, Ohio—(Official)—G. F. McKibben, Van Werf, Ohio, has been retained by the village to prepare plans for the construction of a water system. Milton R. Millette is Village Clk.

Canton, Ohio—About $47,000 will be spent by the city for the extension and relaying of water mains in various streets. L. B. Ohliger is Supt. of Water-Wks.

Cincinnati, Ohio—(Official)—Bids will be received until noon, Apr. 30, by Philip Fosdick, Dir. Pub. Ser., for water mains for Madison Rd., Yononte Ave., Deerfield Rd., Euclid Ave., Kennedy Rd., Montgomery Rd. and Belmont Ave.

Cincinnati, Ohio—(Official)—Bids will be received until noon, Apr. 30, by Philip Fosdick, Dir. Pub. Ser., for furnishing valves for the water department.

Cincinnati, Ohio—(Official)—Bids will be received until noon, Apr. 30, by Philip Fosdick, Dir. Pub. Ser., for laying c.-i. water pipe with specials and valves in various streets.

Cleveland, Ohio—Bids will be received by the Commissioner of Purchases and Supplies, until noon, Apr. 30, for riveted steel pipe and steel rails for the water department.

Columbus, Ohio—Bids will be received until noon, Apr. 28, by H. C. Barrett, Secy., Dir. Pub. Safety, for 200 fire hydrants.

Greenwich, Ohio—It is stated that plans are being prepared for the construction of a new reservoir and for pumps. F. H. Daniel is City Clk.

Port Clinton, Ohio—(Official)—Bonds for $10,000 have been sold, the proceeds of which will be used for the improvement of the water system. W. H. Williamson is Village Clk. Noted Mar. 4 and Apr. 8.

Toledo, Ohio—(Official)—Bids were received Mar. 31 for constructing a high-pressure fire service pumping station as follows: Arrow Engineering Co., St. Louis, Mo., $192,907; A. Bentley & Sons Co., Toledo, $135,000, and Henry J. Spieker Co., Toledo, $177,508. The W. J. Sherman Co., Toledo, is Engr. Noted Feb. 25, Mar. 4 and 15.

Carlyle, Ill.—Bids will be received until 2 p.m., May 1, by the Board of Local Improvements for laying 9300 ft. of 4-in. c.-i. water mains and 2-in. galvanized-iron pipe. H. C. Norcross is Mayor.

Kewanee, Ill.—The citizens contemplate spending $11,000 for making extensions to the water system. C. A. Dunbar is Supt. of Water-Wks.

†Madison, Wis.—The contract has been awarded by the Board of Public Works to JOHN T. BLAKE, Madison, at $39,000, for laying c.-i. water mains.

Melrose, Wis.—Bonds for $10,000 have been voted by the citizens, the proceeds of which will be used for the construction of a municipal water system. The work includes a 30,000-gal. steel tank on a 100-ft. tower, 2310 ft. of 6-in. and 4950 ft. of 4-in. c.-i. water pipe, 19 double hydrants and a 6-hp. gasoline engine. W. E. Miller is Engr. Noted Feb. 25.

Colo, Iowa—Bonds for $18,000 have been voted by the citizens, the proceeds of which will be used for the construction of a water system. L. W. Cox, Youngerman Blk., Des Moines, is Engr. Noted Apr. 1.

†Goldfield, Iowa—The contract has been awarded to the C. W. ROLAND CO., Des Moines, at $10,475, for constructing a water system. Other bids were: M. C. Fraser, Minneapolis, Minn., $10,900; Des Moines Bridge & Construction Co., Des Moines, $10,350; Whyte & Son, Goldfield, $10,500, and the Alamo Bridge & Construction Co., Minneapolis, Minn., $10,600. Noted Sept. 24.

Linn Grove, Iowa—C. A. Fulton, Pres. Water-Wks. Bd., would like to hear from engineers concerning the construction of a water system. Noted Jan. 14 and Feb. 25.

Lowden, Iowa—The citizens will hold another election to vote on the question of installing a water system. Noted Mar. 18.

Morning Sun, Iowa—Bids will be received until 1:30 p.m., May 3, by W. B. Garvin, Town Clk., for constructing a water system. Harper & Stiles, Grand Ave. Temple, Kansas City, Mo., is Engr. Noted July 2 and Mar. 18.

Walker, Minn.—Bonds for $10,000 have been voted by the citizens, the proceeds of which will be used for the construction of a water system.

Ft. Scott, Kan.—Bonds for $32,000 have been voted by the citizens, the proceeds of which will be used for the construction of a filtration plant. F. D. Martin, Rialto Bldg., Kansas City, Mo., is Engr. Noted Jan. 14 and Mar. 18.

Broken Bow, Neb.—Bonds for $15,000 have been voted, part of the proceeds of which will be used for the construction of a water system. Noted Jan. 14 and Apr. 1.

Central City, Neb.—Bonds for $21,000 have been voted by the citizens, the proceeds of which will be used for making extensions to the water system.

Kimball, Neb.—Bonds for $8000 have been voted, the proceeds of which will be used for the extension of the water system.

Medicine Lake, Mont.—(Official)—Bonds for $18,000 have been sold, the proceeds of which will be used for the construction of a water system. H. Everson is Town Clk. Noted Sept. 24, 1914, and Apr. 3, 1915.

Kansas City, Mo.—(Official)—Bids will be received until 2 p.m., May 5, by J. P. Langan, Pur. Agt., for a steam turbine, reduction gear, centrifugal pumping unit. Plans are on file with Burton Lowther, Ch. Engr.

St. Louis, Mo.—Improvements and extensions to the water system, estimated to cost $2,250,000, have been recommended by E. E. Wall, Water Comr.

Beebe, Ark.—The city contemplates constructing a water system at an estimated cost of $30,000. Albert C. Moore, Frisco Bldg., Joplin, Mo., is Engr.

Harrison, Ark.—Plans have been prepared by Albert C. Moore, Frisco Bldg., Joplin, Mo., for the construction of a water system. Noted Nov. 5 and Jan. 14.

Marshall, Ark.—The construction of a water system is under consideration by A. B. Johnson and C. B. Johnson.

Aransas Pass, Tex.—Bonds for $35,000 have been sold. Part of the proceeds will be used for the construction of a water system.

Columbus, Tex.—The city contemplates an expenditure of $8000 for laying 20,000 ft. of wooden water mains and installing hydrants.

Hillsboro, Tex.—At a election, held Apr. 6, the citizens voted against the question of issuing bonds, the proceeds of which was to have been used for the construction of a water system. Noted Mar. 18.

†Houston, Tex.—The contract has been awarded to CHARLES S. BASHAM, Houston, at $5462 each for concrete water tanks. Noted Mar. 11.

Chandler, Okla.—At a recent election the citizens voted against issuing bonds, the proceeds of which was to have been used for the construction of a water system. A. B. Oleson is Mayor.

Wilburton, Okla.—The citizens defeated the bond issue, the proceeds of which was to have been used for the construction of a water system. Noted Dec. 17 and 31 and Mar. 18.

Craig, Colo.—Bonds for $40,000 have been voted by the citizens, the proceeds of which will be used for the construction of a water system. Noted Apr. 8.

Edgewater, Colo.—At an election held recently the citizens voted against the question of issuing bonds for $40,000, the proceeds of which was to have been used for the construction of a new water system.

Montrose, Colo.—(Official)—Bids will be received until May 6 for furnishing c.-i. pipe, Matheson joint and steel pipe, hydrants and valves and for laying about six miles of water mains and four miles of 10-in. and 12-in. flow line of either Matheson joint, c.-i. or steel pipe. Burns & McDonnell, Kansas City, Mo., is Engr. Noted Feb. 18, Mar. 11 and 25 and Apr. 8.

Caldwell, Idaho—The directors of the Black Canyon Irrigation District have had a conference with C. L. Tallmadge, New York, N. Y., concerning the resumption of work on its irrigation system.

Sterling, Idaho—The Boon Creek Irrigation Co., recently incorporated with $10,000 capital, will construct an irrigation system. Harry Hamilton is interested.

Price, Utah—Bonds for $10,000 have been sold, the proceeds of which will be used for the improvement of the water system. Noted Dec. 17.

Glendale, Ariz.—Bonds for $50,000 have been voted, the proceeds of which will be used for the construction of a municipal water system.

Aberdeen, Wash.—The low bidders for pumps for the Fairview reservoir were: Henry R. Worthington Co., $6138, for a steam turbine engine; Douglass Bros., Aberdeen, $3795, for an electrical pump and Snow & Co., $19,960, for a crude oil engine.

Ephrata, Wash.—According to press reports the local water system owned by L. H. Pruitt has been sold to F. P. Grover for $20,000. Extensions will be made.

Everett, Wash.—A report has been made by Burns & McDonnell, Kansas City, Mo., to the City Council, estimating the value of the present water system at $1,091,633. The cost of connecting the Sultan River supply with the system is estimated at $585,000, or with a supply from Miners Creek, $623,170. Noted Dec. 10.

Seattle, Wash.—The City Council contemplates constructing a 1700-ft. reinforced-concrete dam on the Cedar River near the leaks in the impounding basin of the Cedar River Dam. A. H. Dimock is City Engr.

Seattle, Wash.—Plans have been approved by the Board of Public Works for laying water mains in 37th Ave., N. E. Estimated cost, $15,000.

Echo, Ore.—Bids will soon be received by the Teel Irrigation District for the purchase of about $800,000 in bonds, the proceeds of which will be used for the construction of a dam, a tunnel and irrigation ditches. W. B. Hinkle, Echo, is Ch. Engr. Noted Jan. 28.

Eugene, Ore.—Contracts will probably be awarded to H. E. Doering, Portland, at $9245, and to the Mohawk Lumber Co., Eugene, at $6785, for constructing a 2,500,000-gal. concrete reservoir. Noted Oct. 8, Feb. 11, Mar. 1 and Apr. 1.

Oregon City, Ore.—A bond issue for $375,000 has been declared legal by the Supreme Court. The proceeds will be used to obtain water from the south fork of the Clackamas River. William Andresen is one of the Water Commissioners. Noted Mar. 18.

Dundas, Ont.—McPhie, Kelly & Darling, Bank of Hamilton Bldg., Hamilton, has prepared plans for the extension of the water system including a new storage dam. The estimated cost is $6000. R. W. Karch is Engr. of Pub. Utilities Comn.

Newmarket, Ont.—The Fire and Light Committee will purchase a new 15-hp. electric pump for the water-works. The estimated cost is $9000.

Ottawa, Ont.—Bids will be received until 5 p.m., May 12, by the Secretary of the Water-Works Committee for furnishing and erecting one electrically operated pumping unit. R. L. Haycock is Acting Water-Wks. Engr.

SEWERS

Andover, Mass.—The city has appropriated $75,000 for extending the sewer system to the Abbott and Marland section. McClintock & Woodfall is Engr.

Boston, Mass.—Bids will be received until Apr. 23 by the Department of Public Works for constructing sewers and drains in Gustine and Fairview St. and in Peacevale Rd., Dorchester District. L. K. Rourke is Comr.

Fall River, Mass.—Plans are being prepared by Fay, Thorndike & Spofford, Engr., for the construction of 60 miles of new sanitary sewers and 15 miles of storm sewers.

†Fitchburg, Mass.—Bids were received Apr. 7 by the Board of Sewage Disposal Commissioners for constructing Section 7 of the main intercepting sewer as follows: JOSEPH LONG & CO., Leominster, $12,099 (awarded contract); F. A. Gammino, Providence, R. I., $14,065; D'Onfro Bros., Leominster, $15,688; Ralph E. Bull, $16,931. Noted Mar. 18.

Marlboro, Mass.—The city contemplates extending the sewer system. Estimated cost, $58,000. Warren J. Simonds is City Engr.

Hartford, Conn.—At a recent election the citizens defeated the proposition to appropriate $50,000 for the construction of a storm sewer in South St.

Binghamton, N. Y.—Bids will be received until Apr. 28 by D. W. Foster, City Clk., for constructing sewers in Judson, Lorraine and Prospect Ave., and in Baxter, Julian and Hazel St.

Great Neck Station, N. Y.—Bids will be received until Apr. 30 by John B. Gilliar, Chn. Sewer Comn., for the construction of 12 miles of 8- to 24-in. vitrified pipe sewers, appurtenances and two pumping stations, c.-i. force mains and disposal works and sedimentation tanks. Carl H. Watson is Engr.

Newburgh, N. Y.—The city contemplates the construction of the Bridge St. sewer from William and Renwick St. to the Quassaick bridge.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids will be received by L. H. Pounds, Borough Pres., until 11 a.m., Apr. 28, for constructing and repairing sewers in the various streets of the Borough.

New York, N. Y.—(Borough of Queens)—(Official)—Bids were received Apr. 14 by Maurice E. Connolly, Borough Pres., for (a) constructing sewers in Britton Ave. from Broadway to Ithaca St., and in Ketcham St. from Britton Ave. to Pettit Pl., Second Ward, (b) constructing sewers in Grove St. from Seneca and Covert Ave. to Fairview Ave., and in Fairview

Ave. from Linden to Ralph St., Second Ward, as follows: Rodgers & McManus, (a) $8080, (b) $9696; Peace Bros., (a) $7007, (b) $9397; Clancy & Nuhn, (a) $5480, (b) $9375; James H. Johnson, (a) $4386, (b) $8180; Charles A. Myers Contracting Co., (a) $6230, (b) $10,606; William J. Horie, (a) $4395; H. J. Mullen Contracting Co., (a) $5508, (b) $9771; Evergreen Construction Co., (a) $5732; Green Contracting Co., (a) $5001; Tony Lapadula, (a) $5722, (b) $9236; Briggs & McLoughlin, (a) $6616, (b) $11,220; Rosenthal Engineering & Contracting Co., (b) $9072; Gifford Construction Co., (b) $8703; Joseph L. Sigretto, (b) $10,644; Murphy Bros., (b) $21,283; Stanhope Contracting Co., (b) $10,041. Noted Apr. 8.

Niskayuna, N. Y.—The Town Board contemplates the extension of a sewer in District No. 1.

Olean, N. Y.—Bids will be received until May 15 by H. E. Bunce, City Engr., for the construction of 8000 ft. of 10- to 18-in. vitrified sewer. Estimated cost, $8000.

Rensselaer, N. Y.—(Official)—(Correction)—The city contemplates constructing sewers in Akin Ave., Ring, Second, Fifth, Ninth and Birch St. Frank R. Lanagan is City Engr.

Yorkville, N. Y.—Bids will be received until 8 p.m., Apr. 30, by the Board of Trustees for constructing 3684 lin.ft. of 12-in. and 2050 lin.ft. of 8-in. vitrified pipe sewer, nine manholes and three lampholes. Noted Dec. 31.

Haddonfield, N. J.—The Board of Commissioners has approved a bond issue of $17,000 for the construction of sewers in Kings Highway. Noted Mar. 11.

Hammonton, N. J.—According to press reports the proceeds of the $108,500 bond issue will be used to pay for sewer work already completed and not for proposed work as reported in the issue of Apr. 15.

Newark, N. J.—Bids will be received until 2 p.m., May 11, by the Passaic Valley Sewerage Commission, Essex Bldg., for constructing the northern portion of Section 19 of the Auquackanonk, Garfield and Passaic branch sewer of the Main Intercepting Sewer.

Trenton, N. J.—Bids will be received until 2:30 p.m., Apr. 28, by the City Commissioners for the construction of a sewer in Pennsylvania Ave. Frank Thompson is City Clk.

✚Ventnor, N. J.—(Atlantic City post office)—The contract for the construction of a force main and intercepting sewer has been awarded to the CANTRELL CONSTRUCTION CO., Philadelphia, Penn., at $27,075. S. H. HENRY has been awarded the contract for the construction of a sewage-disposal plant. Noted Feb. 4 and Mar. 4.

Jersey Shore, Penn.—Plans have been prepared by C. D. McCullough, City Engr., for the construction of a sewer in Burke St.

★Philadelphia, Penn.—Bids will be received until noon, Apr. 29, by M. L. Cooke, Dir. of Pub. Wks., for constructing a 6x9-ft. reinforced-concrete sewer in Venango St., a 13-ft. 6-in. brick sewer in Ashdale St., a 6-ft. 6-in. brick sewer in Adams Ave., a 10-ft. brick sewer in Robbins St., reconstruction of sewers in Thompson St., a 5-ft. brick sewer in Farhill St., a 10-ft. 6-in. sewer in Seventh St., a 5-ft. 6-in. and a 6-ft. sewer in 34th St. and for special work in Annsbury St. Plans are on file at the office of Engineering News, 36th St. and 10th Ave., New York.

Philadelphia, Penn.—Bids will be received until Apr. 29 by M. L. Cooke, Dir. Pub. Wks., for constructing branch and main sewers, according to Schedules A to D; Schedule E, shafting and belt mule drive over enginer No. 1 at the Pennypack Creek pumping station.

★Reading, Penn.—(Official)—Bids will be received until 11 a.m., Apr. 30, by Charles Marks, City Clk., for the construction of a sewer in West Elm and Elm St. and for the construction of a sewage filter on Fritz's Island. Edmund B. Ulrich is City Engr. Noted Sept. 17 and Oct. 1.

Wilkes-Barre, Penn.—(Official)—Bids will be received until May 25 by F. H. Gates, City Clk., for constructing brick, segment block and terra cotta pipe sewers. B. K. Finch is City Engr.

Arlington, Md.—Plans have been prepared by Ezra B. Whitman, Engr., 1319 Fidelity Bldg., Baltimore, for the construction of a sewer system and a sewage-disposal plant. Noted Dec. 10.

Fairmont, W. Va.—The city plans to construct storm sewers estimated to cost $40,000.

Elisabeth City, N. C.—Bids will be received until May 1 by J. S. Whitehurst, City Engr., for constructing sewers.

Walterboro, S. C.—Bids will be received until May 14 by H. W. Black, Chn. of Bd. Comrs., for the construction of a sewer system, estimated to cost $13,000. The H. S. Jaudon Engineering Co., Southern Bank & Trust Bldg., Savannah, Ga., is Engr. Noted Feb. 18 and Mar. 25.

✚Ft. Myers, Fla.—The contract for the construction of 725 ft. of 12-in., 716 ft. of 10-in., 1570 ft. of 8-in. pipe sewers, five manholes, and two flush tanks has been awarded to F. E. TRAPP.

Tampa, Fla.—(Official)—An election will be held May 25 to vote on the bond issue of $250,000 for the extension of the sewer system. R. B. Martin is City Engr. Noted Apr. 8.

Jackson, Miss.—The city contemplates constructing sanitary sewers in Ewing, Line, Lewis and Central St.

Hammond, La.—An election will soon be held to vote on the question of issuing $33,840 in bonds, the proceeds of which will be used for the construction of a sewer system. J. H. O'Neal is Engr.

Alliance, Ohio—Bids will be received until Apr. 26 by J. E. Hogan, Clk. of Bd. of Pub. Ser., for constructing the Ryan Run storm sewer.

Barberton, Ohio—Bids will be received until Apr. 24 by O. D. Everhard, Dir. Pub. Ser., for constructing main and storm sewers in District No. 1.

Cheviot, Ohio—(Cincinnati post office)—Bids will be received until noon, Apr. 24, by Albert J. Rensing, Clk., 3507 Harrison Ave., for the construction of a sewer in Harrison Ave. from Beech St. to Francis Ave.

✚Cleveland, Ohio—The contract for the construction of a sewer in Waterloo Rd., W. E., has been awarded to the AMATA CONSTRUCTION CO., at $13,550.

Dayton, Ohio—The city contemplates constructing storm sewers in Commercial, Eaton, Highland, Arbor, Evaston and Old Orchard St. The estimated cost is $15,500.

Quincy, Ohio—(Official)—The Smith & Boulay Co., 320 Nasby Bldg., Toledo, has been retained by the village to prepare plans for the construction of a sanitary sewer system and a sewage-disposal plant.

✚Urbana, Ohio—The contract for the construction of the South Main St. sewer has been awarded to CHARLES F. SMITH CO., Dayton, at $9300. BOYD & COOK, Dayton, has been awarded the contract for the construction of storm sewers in Scioto and Kenton St., at $7800. Noted Apr. 8.

Ft. Wayne, Ind.—The City Council contemplates the construction of a main sewer in the Spy Run District.

Grand Rapids, Mich.—The city contemplates constructing a sewer system. The estimated cost is $45,000. L. E. Stevens is City Engr.

✚Maywood, Ill.—The contract has been awarded to the TONKAWA CONSTRUCTION CO., Kansas City, Mo., at $85,000, for the construction of 2½ miles of concrete and vitrified pipe outlet sewer and 5½ miles of 12-in. and 15-in. lateral sewers. Bids were opened Apr. 1. Noted Mar. 25.

Kenosha, Wis.—Bids will be received until 2 p.m., Apr. 23, by B. C. Brennan, City Engr., for constructing 1500 ft. of 84-in., 2700 ft. of 66-in., and 1200 ft. of 36-in. sewers.

✚Madison, Wis.—(Official)—The contracts for constructing sewers in the Fair Oaks district have been awarded to J. T. BLAKE, at $39,800, SWEENEY BROS., at $31,500, and the PASTORET CONSTRUCTION CO., at $8197. Noted Apr. 8.

New Glarus, Wis.—(Official)—Bids will soon be received by E. J. Hoesly, Village Clk., for constructing 1015 ft. of 8-in., 283 ft. of 6-in., 720 ft. of 5-in. vitrified pipe sewers, five manholes, one lamphole and one flush tank.

Sheboygan Falls, Wis.—The lowest bid received by the Common Council for the construction of sanitary sewers in Monroe St. was that of the David Van Stelle Co.

Sheboygan Falls, Wis.—The Council Commission has passed an ordinance authorizing an issue of bonds for $35,000 for the completion of the Stringham Creek sewer.

Ames, Iowa—Bids will be received until 7:30 p.m., May 3, by A. B. Maxwell, City Clk., for constructing sanitary sewers and sub-drains in Fifth St. and Douglas Ave.

Jewell Junction, Iowa—(Jewell post office)—Bids will be received until May 3 by M. J. Steverson, Clk., for the construction of a sanitary sewer system, disposal plant and outlet sewers. Noted Apr. 1.

Mt. Ayr, Iowa—Plans have been prepared by W. T. Archer & Co., Kansas City, Mo., for the construction of a sewer system. Noted Mar. 25.

✚Postville, Iowa—The contract for the construction of 4½ miles of 8-in., 10-in., and 12-in. vitrified tile pipe sewer, and a sewage disposal plant has been awarded to M. TSCHIRIGI & SONS, Cedar Rapids. Noted Oct. 8, Nov. 12, Jan. 21 and Mar. 25.

✚Sioux City, Iowa—The contract for the construction of the Geneva St. sewer system has been awarded to F. T. LEEDER.

Tripoli, Iowa—Bids will be received until Apr. 30 by H. W. Bockhams, City Clk., for the construction of a sewer system. The estimated cost is $35,00. Noted Mar. 11.

Waterloo, Iowa—The city contemplates constructing a sewer system.

✚Eveleth, Minn.—The contract for constructing 1062 ft. of 24-in. pipe, 270 ft. of 18-in. pipe, 535 ft. of 15-in. pipe, 630 ft. of 12-in. pipe, 1525 ft. of 36-in. segment block sewers, manholes and catch basins in Garfield and Pierce St. and Cleveland and Adams Ave. has been awarded to the LAWRENCE-McCANN CO., at $15,488.

St. Paul, Minn.—The city contemplates the construction of a storm sewer in Sixth St. Estimated cost, $17,000. Oscar Claussen is City Engr.

St. Paul, Minn.—The State Senate Finance Committee has appropriated $30,000 for State Aid in the construction of a sewer system in North Hamline and the State Fair Grounds.

Chanute, Kan.—Plans are being prepared by Worley & Black, Engr., 301 Reliance Bldg., Kansas City, Mo., for the construction of a sewage-disposal plant. Estimated cost, $40,000.

Valley Falls, Kan.—The citizens have voted $45,000 in bonds for the construction of a sewer system.

Broken Bow, Neb.—The citizens defeated the question to issue $14,500 in bonds for the construction of a sanitary sewer system. H. E. Thompson is City Clk. Noted Mar. 25.

✚Ravenna, Neb.—(Official)—The contract for the construction of a sewer system has been awarded to the ARTHUR DOBSON CO., Lincoln, at $20,000.

Sioux Falls, S. D.—Bids will be received until 9 a.m., Apr. 26, by the Board of Commissioners for the construction of a sewer in 21st St. from Phillips to Minnesota Ave.

Belgrade, Mont.—The Town Council has decided to postpone the construction of the proposed sewer system for about two years. Noted Mar. 25 and Apr. 1.

✚Butte, Mont.—(Official)—Bids were received Mar. 15 by John C. Driscoll, City Clk., for the construction of a sewer system for the South Side as follows: ROBERT METCALF, 1429 Warren Ave., $88,467 (awarded contract); F. G. Dunn, $93,963; Kennedy Construction Co., $95,974; R. M. Bardsen & Co., $105,419; C. L. De Vall, $106,090; Linstrom & Oren, $107,244; George W. Kemper, $108,306; Atlas Construction Co., $110,946; J. Kelley, $115,343; Stamson & Hexam, $116,819; J. C. Maguire, $116,909; Haggart Construction Co., $117,035; G. H. Nash & Co., $119,359; Idaho Hardware & Plow Co., $119,718. W. J. Flood is City Engr. Noted Feb. 18.

Kansas City, Mo.—An election will be held May 25 to vote on the question of issuing $500,000 in bonds, the proceeds of which will be used for constructing sewers. Curtis Hill is City Engr.

Springfield, Mo.—At a recent election the citizens defeated the proposition to issue bonds for $50,000 for constructing one mile of main sewer and a septic tank.

Harrison, Ark.—Plans are being prepared by Albert C. Moore, Engr., Frisco Bldg., Joplin, Mo., for the construction of a sewer system. Noted Nov. 5 and Jan. 7.

Austin, Tex.—An election will soon be held to vote on the question of issuing $25,000 in bonds for constructing additions to the sewer system.

Beaumont, Tex.—An election will be held on May 20 to vote on the question of issuing $30,000 in bonds for the construction of a sewer system. C. L. Scherer is City Engr.

Brownwood, Tex.—The citizens have voted $8000 in bonds for the construction of a septic tank.

Houston Heights, Tex.—Bids will be received until 6 p.m., May 10, by the City Council for the construction of 1400 ft. of 84-in. and 600 ft. of 36-in. storm sewers with inlets and catch-basins.

Oak Cliff, Tex.—(Dallas post office)—Bids will soon be received by R. R. Nelms, City Comr., for constructing another unit of the Cedar Creek interceptor and overflow sewer, estimated to cost $16,000.

Texarkana, Tex.—The city will issue bonds for $14,000, the proceeds to be used for improving the sewers in District No. 3. Noted Dec. 31.

Edgewater, Colo.—At a recent election the citizens defeated the question to issue $60,000 in bonds for the construction of a sewer system.

Hugo, Colo.—The city contemplates constructing a sanitary sewer system.

American Falls, Idaho—Bids will be received until May 7 by O. F. Crawley, Clk. of Sewer Com., for constructing 14,600 ft. of 8-in. vitrified pipe, 3000 ft. of 9-in. vitrified pipe, 4300 ft. of 12-in. vitrified pipe sewers, 18 concrete manholes and 30 concrete flush tanks.

✚Salt Lake City, Utah—The City Commissioner has awarded the contract to RYBERY BROS., at $10,039, for the construction of a sewer in District No. 250.

Mesa, Ariz.—The Sewer Commission of the City Council has approved the plans prepared by John Sandberg & Co., Engr., Denver, Colo., for the construction of a sewer system. Estimated cost, $75,000. Harry L. Hancock is City Engr. Noted Apr. 1.

✚Phoenix, Ariz.—The contract for the construction of a sewer system has been awarded to THOMAS M. FORSON, Kansas City, Kan., at $22,347.

✚Phœnix, Ariz.—See item under "Federal Government."

✚Enumclaw, Wash.—It is reported that the contracts have been awarded to DENNY RENTON CLAY & COAL CO., Hoge Bldg., Seattle, for sewer pipe and to the Pacific Sewer & WATERMAIN CONSTRUCTION CO., Tacoma, for ditch work, in connection with the sewer system, estimated to cost $25,000. Noted Mar. 18.

Spokane, Wash.—Bids were received by the City Council for the Sprague Ave. and Division St. section of the proposed sewer changes in connection with the Northern Pacific grade separation work as follows: P. L. Langan, $28,064; James C. Board, $41,965; Hurd & De Camp, $43,695, and J. Hoy & Co., $23,509. Morton Macartney is City Engr. Noted Apr. 1.

Klamath Falls, Ore.—Plans have been prepared by J. McLean, City Engr., for the construction of a sewer system. Estimated cost, $140,000.

Portland, Ore.—Bids will soon be received by A. L. Barbour, City Audr., for the construction of sewers. Plans have been prepared by the City Engineering Department. The estimated cost is $28,000.

✚Huntington Beach, Calif.—The contract for the construction of the outfall section of the municipal sewer system and a septic tank has been awarded to the HELLAND CONSTRUCTION CO., San Diego, at $11,900. Noted Mar. 11 and Apr. 15.

✚Long Beach, Calif.—The contract for furnishing the city with 1300 tons of c.-i. pipe for the construction of a municipal sewer system has been awarded to the U. S. CAST IRON PIPE & FOUNDRY CO., Burlington, N. J.

✚Richmond, Calif.—The City Council has awarded the contract for the construction of lateral sewers to CHAMBERS & HEAFY, at $9726.

Montreal, Que.—It is reported that the city contemplates constructing sewers estimated to cost $900,000.

Hamilton, Ont.—Bids will be received until 5 p.m., Apr. 27, by M. Kent, City Clk., for equipping the Gage Ave. sewage pumping station. J. Macallum is City Engr.

Oakville, Ont.—The Town Council contemplates constructing sewers in various streets, estimated to cost $9910. W. E. M. Crawley is Clk.

Toronto, Ont.—Bids will be received until noon, Apr. 27, by T. L. Church, Chn. of Bd. of Control, City Hall, for the construction of sewers in Blackthorn, Hallawell, Osler, Prescott, and Sunnyside Ave.

Vancouver, B. C.—Bids will soon be received by the Board of Joint Sewerage Commissioners for the construction of the Clark Drive sewer from the high water mark to a point about 1500 ft. out into the inlet. A. D. Creer is Engr. Noted Dec. 10.

GARBAGE

✚Schenectady, N. Y.—The contract has been awarded to M. F. DOLLARD, Albany, at $48,500, for the collection of garbage and ashes for five years.

✚Coraopolis, Penn.—(Official)—The contract for a 10-ton Decarie incinerator, with forced-draft fan, ash-handling equipment has been awarded to the STACY-BATES CO., Minneapolis, Minn., at $10,600.

Philadelphia, Penn.—The only bid received Apr. 8 by the Department of Public Works for garbage disposal for 1916 was that of the Penn Reduction Co., at $363,588. Noted Apr. 8.

Huntington, W. Va.—The City Commissioners have received a proposition from the Macon Incinerator Mfg. Co., Macon, Ga., to install a plant. The city will build another incinerator in the eastern section of the city. Noted Mar. 18.

Beaumont, Tex.—An election will be held May 20 to vote on the question of issuing $5000 in bonds, the proceeds of which will be used for the construction of an incinerator.

Hillsboro, Tex.—Bonds for $5000 have been voted, the proceeds of which will be used for the construction of a crematory. A. Humphries is City Engr.

Toronto, Ont.—(Official)—In our issue of Apr. 1 it was stated that the Canadian Griscom Russell Co. was awarded contract for constructing three incinerating furnaces and Self Bros. was the next lowest bidder. The bid of Self Bros. was informal and the Universal Engineering Co., San Francisco, Calif., at $55,973 was the next lowest.

STREETS AND ROADS

Boston, Mass.—A bill for the appropriation of $2,000,000 for the construction of good roads has been recommended by the Governor and is being considered by the State Legislature.

✚Boston, Mass.—The contract for the construction of 10,200 lin.ft. of state road in Duxbury, has been awarded by the Highway Commissioners to E. J. ROURKE, Abington, at $11,420. Other bids were: D. J. Sheehan, Lynn, $12,223; F. E. Ellis, Melrose, $13,972; Middlesex Contracting Co., North Adams, $19,319. Noted Apr. 1.

Boston, Mass.—Bids will be received until Apr. 26 by the Public Works Department for asphalt or bitulithic pavements, in Hopestill and Wellington Hill St., Dorchester District. L. K. Rourke is Comr.

✚Boston, Mass.—Bids were received Apr. 13 for constructing (a) 3600 lin.ft. of road in Gardner, (b) 10,600 lin.ft. of road in Ashby as follows: ALCO CONTRACTING CO., Boston, (a) $6886, (b) $10,180 (awarded contract); R. F. HUDSON, Melrose, (a) $6506 (awarded contract); Sewell, Small & Ingalls, Bar Harbor, Maine, (a) $6746, (b) $11,770; B. Pompiani & Co., Quincy, (a) $6926, (b) $9825; B. F. Savage, Worcester, (a) $7056; C. E. Horne, Millbury, (a) $7306, (b) $11,905; J. J. Merco, Watertown, (a) $7594; F. E. Ellis, Melrose, (a) $7858, (b) $14,045; D. H. Dadmon, Ashby, (a) $10,845; E. R. Newell, Uxbridge, (b) $11,300; F. J. Mague, West Newton, (b) $12,260; C. A. Kelly, Somerville, (b) $12,860; W. J. Donovan, Fitchburg, (b) $13,147. Noted Apr. 8.

Boston, Mass.—Bids will be received until Apr. 22 by the Supply Department for 60,000 lin.ft. of edgestone, 9000 lin.ft. of circle stone and flagging. D. Frank Doherty, 808 City Hall Annex, is Supt.

Boston, Mass.—Bids will be received until Apr. 27 by the State Highway Commission for the construction of roads as follows: 8100 lin.ft. in Somerset and Swansea; 6200 lin.ft. in Rehoboth; 7400 lin.ft. in Somerset; 6100 lin.ft. in Dighton and Taunton; 8500 lin.ft. in Reading and 4700 lin.ft. in Beverly. Arthur W. Dean, 15 Ashburton Pl., is Ch. Engr.

✚Hartford, Conn.—Contracts for state road work in Enfield Township and Greenwich have been awarded to A. D. BRIDGE'S SONS, Hazardville, at $8000 and $5500 respectively.

★Albany, N. Y.—(Official)—Bids will be received until 1 p.m., Apr. 29 by Edwin Duffey, State Highway Comr., 55 Lancaster St., for furnishing stone to the various counties.

✚Albany, N. Y.—The contract for repaving Eagle St. from Elk to Myrtle St. has been awarded to PATRICK W. MULDERRY, at $52,387.

✚Albany, N. Y.—The contract for repaving James St. from State to Columbia St. has been awarded to KENNY & DUMARY, at $9108.

★Albany, N. Y.—(Official)—Bids will be received until 1 p.m., May 5, by Edwin Duffey, State Highway Comr., for improving highways in various counties.

✚★Albany, N. Y.—(Official)—Bids were received Apr. 14 by Edwin Duffey, State Highway Comr., and contracts awarded for road construction as follows:

Road No. 1229, Albany County, 2.30 miles—Amos D. Bridge's Sons, Inc., Hazardville, Conn., $25,332; John Arborio, New Haven, Conn., $24,016; Curran Corporation, Middletown, Conn., $25,675; S. B. Van Wagonen, Inc., Rondout, $25,273; JOHN W. FLYNN, Waterford, $23,668 (awarded contract); David H. Craw, Ravena, $25,404; Highway Engineering Co., Inc., Albany, $24,815.

Road No. 1246, Allegany County, 6.71 miles—John Johnson Construction Co., Buffalo, $101,914; Sullivan Construction Co., Syracuse, $101,814; James E. Martin, Utica, $101,845; GREENFIELD CONSTRUCTION CO., Hornell, $96,379 (awarded contract); Bison City Engineering & Contracting Co., Buffalo, $103,042; J. W. Brennan Construction Co., Inc., Geneva, $102,125; McNierney Construction Co., Canton, Penn., $102,128.

Road No. 1177, Essex County, 5.34 miles—Harold J. Shields, Albany, $53,251; Rumpf & Stevens, Lake Placid, $53,114; S. B. VAN WAGONEN, INC., Rondout, $52,042 (awarded contract); C. W. Tryon, Boyntonville, $55,985.

Road No. 1250, Franklin County, 5.50 miles—Fulton Engineering Co., Inc., Albany, $73,851; SPUYTEN-DUYVIL CONSTRUCTION CO., New York, $73,054 (awarded contract); Richard Hopkins, Troy, $75,611.

Road No. 1251, Franklin County, 4.91 miles—Flood & Van Wirt Co., Hudson Falls, $45,361; W. T. Thayer & Co., Chateaugay, $46,554; John F. Lewis, Albany, $42,542; Latour & Starks, Saranac Lake, $44,671; RUMPF & STEVENS, Lake Placid, $41,417 (awarded contract); William J. Morrissey, Saratoga, $42,713.

Road No. 1252, Franklin County, 11.41 miles—James E. Martin, Utica, $129,824; Weed & Walsh, Mechanicsville, $130,682; Richard Hopkins, Troy, $120,471; Busch & Percival, Buffalo, $118,930; Spuyten Duyvil Construction Co., New York, $104,999. Award withheld.

Road No. 5507, Monroe County, 2.14 miles—Michael H. Ripton, Rochester, $20,370; W. J. FOX, Oramel, N. Y., $18,978 (awarded contract); Ribstine-Holter Co., Inc., Rochester, $20,439; Schroeder-Hicks Contracting Co., Rochester, $20,198; Brooks & Julian, Rochester, $18,357; Greenfield Construction Co., Hornell, $19,649; P. H. Murray, Rochester, $19,309.

Road No. 1236, Monroe County, 1.87 miles—WHITMORE-RAUBER & VICINIUS, Rochester, $20,974 (awarded contract);

James Rossney, Buffalo, $21,631; Wood & Tompkins, Hilton, $22,098; John Johnson Construction Co., Buffalo, $21,603; Ribstine-Holter Co., Inc., Rochester, $21,161; Brooks & Julian, Rochester, $20,997; M. Bennett & Sons, Indiana, Penn., $21,804; George Holler, Albany, $21,271.

Road No. 1158, Oneida County, 2.65 miles—Conroy & Nixdorf, Oneida, $58,701; Spuyten-Duyvil Construction Co., New York, $59,038; C. W. Tryon, Boyntonville, $55,874; Bison City Engineering & Contracting Co., Inc., Buffalo, $58,459; Dale Engineering Co., Utica, $55,820; P. J. Kennedy, Utica, $58,553; A. J. Rockwood, Rochester, $55,678; Monroe Roads Co., Pittsford, $57,859; GREENFIELD CONSTRUCTION CO., Hornell, $51,530 (awarded contract).

Road No. 1243, Oswego County, 5.41 miles—Thomas Grady, Rochester, $44,178; Bison City Engineering & Contracting Co., Inc., Buffalo, $45,869; HARRADINE BROS. CO., INC., Spencerport, $42,454 (awarded contract); Pathfinder Construction Co., Inc., Fulton, $44,940; Michael Murphy, Rochester, $43,693; Semper Bros., Watertown, $45,084; P. H. Murray, Rochester, $45,092.

Road No. 1244, Oswego County, 5.22 miles—Monroe Roads Co., Pittsford, $47,853; Sale Engineering Co., Utica, $48,966; Greece Construction Co., Rochester, $49,627; VALLEY CONSTRUCTION CO., Sidney, $45,069 (awarded contract); James E. Martin, Utica, $49,331; Pathfinder Construction Co., Inc., Fulton, $45,141; I. B. Contracting Corporation, New York, $49,631.

Road No. 1245, Oswego County, 3.66 miles—DeBarber & Hill, Fulton, $30,891; Pathfinder Construction Co., Inc., Fulton, $29,559; Monroe Roads Co., Pittsford, $30,358; Thomas Grady, Rochester, $30,579; J. A. Jova, Inc., Newburgh, $31,108; Fulton Engineering Co., Inc., Albany, $30,600; J. A. CULKIN, Oswego, $29,452 (awarded contract); Greece Construction Co., Rochester, $30,969.

Road No. 5535, St. Lawrence Co., 6.66 miles—W. T. Thayer Co., Chateaugay, $68,461; P. J. Kennedy, Utica, $71,344; Ross-Hallenbeck Construction Co., Copenhagen, $67,786; Weed & Walsh, Mechanicsville, $72,299; Monroe Roads Co., Pittsford, $69,853; T. H. GILL CO., Binghamton, $65,818 (awarded contract); A. J. Rockwood, Rochester, $70,729; Eggleston & Garthwaite, Yonkers, $69,480; Thomas O'Brien, Watertown, $73,353; Spuyten-Duyvil Construction Co., New York, $75,027; Burns Bros. & Haley, Watertown, $79,759; Semper Bros., Watertown, $69,620.

Road No. 5410, Wyoming County, 3.88 miles—Morrison & Quinn, Inc., Rochester, $41,310; JOHN JOHNSON CONSTRUCTION CO., Buffalo, $40,083 (awarded contract); James Rossney, Buffalo, $41,382; George Holler, Albany, $42,186; Wood & Tompkins, Hilton, $43,714; M. Bennett & Sons, Indiana, Penn., $41,618; Thomas F. Murray, LeRoy, $41,386; Bison City Engineering & Contracting Co., Buffalo, $41,676; Ribstine-Holter Co., Inc., Rochester, $41,978. Noted Mar. 25.

★**Albany, N. Y.**—(Official)—Bids will be received until 1 p.m., May 11, by Edwin Duffey, State Highway Comr., for repairing highways in various counties.

✚**Buffalo, N. Y.**—The Board of Public Works has awarded the contract for paving Robinson St. and Runbold Ave. to LOUIS H. GIPP, Buffalo, at $39,189.

Buffalo, N. Y.—The Board of Aldermen has ordered the paving of Larkin St. with stone, and the repaving of Illinois and South Cedar St.

✚**Buffalo, N. Y.**—The Commissioner of Public Works has awarded the contract to the GERMAN ROCK, ASPHALT & CEMENT CO., LTD., for paving Winchester Ave. with asphalt.

✚**New York, N. Y.**—(Borough of Bronx)—(Official)—The contract for 200,000 gal. asphalt road oil has been awarded to the WARNER QUINLAN CO., 79 Wall St., at .032c. per gal. Noted Mar. 25.

New York, N. Y.—(Borough of Bronx)—(Official)—Bids will be received by Douglas Mathewson, Borough Pres., until 10:30 a.m., Apr. 29, for repairing asphalt block pavement and setting curbs; also for furnishing and delivering 175 tons of asphaltic cement.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids will be received until 11 a.m., Apr. 28, by L. H. Pounds, Borough Pres., for furnishing and delivering 2200 cu.yd. of sand, where required in the Borough.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids were received Apr. 14 by the Borough President for improving 18th St. from 11th Ave. to Vanderbilt St. as follows: M. F. Hickey, $10,583; Charles A. Myers Contracting Co., $10,987; M. J. O'Hara, $11,128; Norton & Gorman, $11,121; W. J. Scanlon Co., $10,963; Ulrich & Co., $10,679; Rosenthal Engineering & Contracting Co., $11,189. Noted Apr. 8.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids were received Apr. 14 for improving Front St. from Fulton to Adams St. as follows: Charles A. Myers Contracting Co., $8599; Ulrich & Co., $9261; Rosenthal Engineering & Contracting Co., $9609; W. J. Scanlon, $8895; M. F. O'Hara, $10,029; Norton & Gorman, $8909. Noted Apr. 8.

New York, N. Y.—(Borough of Manhattan)—Press reports state that the city contemplates paving Dutch St. from John to Fulton St., 15th St. from Ave. A to Third Ave., 32nd St. from Second to Third Ave., 40th St. from Second to Lexington Ave. and 176th St. from Audubon to St. Nicholas Ave. with sheet asphalt; also for paving Houston St. from Lafayette to Crosby St., 30th St. from Ninth to Tenth Ave., 32nd. St. from First to Second Ave., 38th St. from First to Second Ave., and 40th St. from First to Second Ave. with granite.

✚★**Oswego, N. Y.**—Contracts have been awarded for constructing approximately 4000 sq.yd. of vitrified brick pavement to J. A. CALKIN, Oswego, at $13,458 and for resurfacing 8500 sq.yd. of old sheet asphalt pavement with vitrified brick to SAMUEL BONN, Syracuse, at $18,409. Noted Apr. 1.

Victor, N. Y.—The Village Council plans to pave Main St. with brick and macadam, at an estimated cost of $10,000.

✚**Buttzville, N. J.**—The contract for constructing the Great Meadows-Buttzville Rd. has been awarded to SMITH BROS., Hackettstown. Noted Feb. 4, Mar. 11, and Apr. 15.

Elizabeth, N. J.—Bids will be received until 2 p.m., Apr. 29, by the City Street Commissioner for flagging Essex and Middlesex Turnpike, North Ave.; and for constructing a sewer in Morris Ave.

Elizabeth, N. J.—Bids will be received until Apr. 26 by the county for grading, regulating and improving the Morris and Springfield Ave. Turnpike.

Harrison, N. J.—The Town Council plans to pave Fourth St. with granite block and Warren, Jersey, Hamilton, William and Cross St. with bitulithic. Peter J. Goodman is City Clk.

Jersey City, N. J.—Bids will be received by the Board of Commissioners until 2 p.m., Apr. 29, for repaving a portion of Clinton Ave. with wood block pavement and a portion of Tuers Ave. with asphalt block pavement. Michael I. Fagen is City Clk.

Jersey City, N. J.—Bids will soon be received by the City Commissioners for improving Gray St. from Mercer to Academy St.

Jersey City, N. J.—The Board of Commissioners plans to improve Ocean Ave. at an estimated cost of $25,000. The work will be under the supervision of the Department of Public Improvements.

✚**Newark, N. J.**—Contracts have been awarded for paving Margaretta St. from Amsterdam to Ave. L and Niagara St. from Berlin to Amsterdam St. to the GLENFIELD CONSTRUCTION CO., at $6089 and $7721 respectively. Noted Mar. 25.

New Brunswick, N. J.—Bids will be received until 2:30 p.m., May 3, by the Board of Chosen Freeholders of Middlesex County for the construction of a bituminous concrete pavement on the Metuchen-Perth Amboy Rd. from the Metuchen line to the Perth Amboy city line. Alvin B. Fox, Perth Amboy, is County Engr.

Newton, N. J.—The Town Committee will soon receive bids for the improvement of Spring St. from Madison Ave. to the railroad station, by paving with concrete.

Passaic, N. J.—Bids will be received about June 1 by the city for paving Albion St. Estimated cost, $5000. C. R. Wise, Passaic, is Engr.

Pennsylvania—Governor Brumbaugh has appointed Robert J. Cunningham, Pittsburgh, to succeed E. M. Bigelow as State Highway Commissioner. It has been determined that special attention shall be paid to road improvements in Pennsylvania, and the appropriation for this work during 1915 and 1916 will be in excess of $8,500,000. Senator Sproul, Chn. of the Senate Finance Com., on Apr. 13 introduced a bill carrying a general appropriation for highway work in the next two years. The bill carries an appropriation of $8,500,000 and does not include the administration expenses of the department and of the Automobile Requisition Bureau, which will be provided for in the general appropriation bill. Of the amount carried by the bill, $6,000,000 is specifically appropriated for the maintenance and improvement of state highways under the act of 1911 and its amendments. This means that the entire state highway system, including those roads added to the original Sproul plan two years ago, will be retained as state highways. The sum of $500,000 is appropriated for the purchase or condemnation of turnpikes upon state highway routes, and $1,000,000 is set aside for the construction and maintenance of state aid highways, and the remaining $1,000,000 is to be devoted to the payment of a portion of the expense of the maintenance of township roads, as provided by the Jones bill. Representative Jones has introduced a separate bill making provision for the payment of deficiencies due by the state to townships under operation of this law. Governor Brumbaugh says that the highway department activities will be carried on under his personal supervision and that he will immediately, upon the assumption of his office by Mr. Cunningham, organize a "roads council," to consist of himself, Commissioner Cunningham and Chief Engineer William S. Uhler. This council will hold frequent regular meetings at which every detail of the work will be discussed, together with appointments to be made and the efficiency of the department.

Catasauqua, Penn.—The City Council has decided to pave Pine, Walnut, Front and Second St. Charles Frederick is Chn. of the Street Com.

Oil City, Penn.—(Official)—Bids will be received until May 3 by the City Council for paving parts of four streets involving approximately 8400 sq.yd. of brick paving and 1600 sq.yd. of brick or wood block. B. B. Weber is City Engr.

★**Reading, Penn.**—(Official)—Bids will be received until 11 a.m., Apr. 30, by Edmund B. Ulrich, City Engr., for street paving and appurtenances.

Baltimore, Md.—Bids will be received until Apr. 27 by the State Roads Commissioners, Garrett Bldg., Baltimore, for the construction of 2.36 miles of state highway, under Contract BC-12, Baltimore City, 1.13 miles sheet asphalt, brick gutters, on Park Heights Ave; also for 23,000 cu.yd. excavation, fill for north approach to Hanover St. bridge, under Contract BC-17, Section 9. Four miles of concrete on section through Chesapeake City, under Contract Cc-14A, Cecil County. About .83 miles concrete or amiesite on section through Centerville, under Contract Q-11, Queen Anne's County.

✚**Towson, Md.**—Contracts has been awarded by the Baltimore County Commissioners, for the improvement of Belvidere Ave. from Parks Heights Ave. to Reisterstown Rd., to P. FLANIGAN & SONS, 120 East Lexington St., Baltimore, at $7140; also to THOMAS B. GATCH & SON, Belair Rd., Raspeburg, at $6128, for the improvement of Old Court Rd., consisting of one mile of macadam.

Clifton Forge, Va.—Press reports state that the city contemplates an expenditure of $10,000 for improving streets.

Huntington, W. Va.—An election will be held May 22, to vote on the question of issuing $600,000 in bonds, the proceeds to be used for constructing roads in Cabell County. Noted Feb. 18 and Apr. 8.

North Carolina—The Legislature of this year created a State Highway Commission, which has been organized as follows: Gov. Locke Craig, Chn.; Dr. Joseph Hyde Pratt, Secy.; Prof. T. F. Hickerson, Prof. W. C. Riddick, and Guy V. Roberts. This Commission has elected W. S. Fallis State Engineer. A report has been compiled dated Apr. 15, showing the road funds. Total amount of bonds issued by counties and townships in North Carolina to Jan. 1, 1915, $8,376,000; amount voted during 1913, sold and used during 1914, $2,000,000;

amount of bonds voted during 1914 and used during 1914, $500,000; estimated amount of bonds voted during 1913 and 1914, to be used during 1915, $1,500,000; bonds voted since Jan. 1, 1915, which will probably be used during 1915, $865,000; special taxes for road purposes, $1,800,000; special taxes estimated for interest in sinking fund, $500,000; portion of special tax money used in road construction and maintenance, $1,200,000; and of this $500,000 will be used for construction and $700,000 for maintenance; the estimated value of labor tax, $800,000; approximate number of short-term convicts used by counties and townships, on an average, is 1700, while 140 state convicts are used on an average.

✚Ashboro, N. C.—A contract for constructing a gravel road from County Home to High Point, about 18 miles, has been awarded to H. H. KENNEDY, Ashboro, at $10,000.

Bryson City, N. C.—Bonds for $100,000 were sold Apr. 10, the proceeds to be used for constructing roads in Swain Rd. District.

Union, S. C.—At the election held Apr. 6 the question of issuing $200,000 in bonds was defeated. Noted Feb. 25.

La Fayette, Ga.—The citizens of Walker County will soon vote on the question of issuing $50,000 in bonds for road construction.

✚Clanton, Ala.—A contract for constructing about 25 miles of road from Clanton to Maplesville has been awarded to W. H. WYNNE, Birmingham.

Russellton, Ala.—Bids will be received until May 10 by the Commissioners of Franklin County, Russellville, for constructing a highway from Russellton to Red Bay.

Tuscumbia, Ala.—The City Council plans to pave a number of blocks in the business section with sheet asphalt. The estimated cost is $35,000.

Lake Charles, La.—Bids will be received until 11 a.m., May 4, by E. C. House, Clk. of the Police Jury, for the construction of Highways Nos. 6, 8, 14 and 16, approximately 35 miles.

✚New Orleans, La.—(Official)—The contract for constructing about five miles of the Jean-Colfax Highway, Ward 3, La Salle Parish, has been awarded to J. N. GEORGE & SONS, Shreveport, at $9655. Other bids were: F. T. Constant, Alexandria, $10,205; J. E. Adams & Anderson, Jena, $10,045. Noted Mar. 18.

Knoxville, Tenn.—Bids will be received until May 8 by R. A. Brown for the sale of $500,000 in bonds, the proceeds to be used for building and repairing pike roads and bridges in Knox County.

★Nashville, Tenn.—(Official)—Bids will be received until 10 a.m., Apr. 29, by the Board of Commissioners for street paving. J. W. Dashiell is Secy. of the Bd. of Comrs.

Nashville, Tenn.—Press reports state that bonds for $430,000 have been sold, the proceeds of which will be used for improving streets.

✚Caledonia, Ohio—The contract for paving the public square with brick has been awarded to E. R. GRAVES, New London, at $5300.

Columbus, Ohio—Bids will be received until May 7 by the Commissioners of Franklin County for improving and macadamizing the Ridgeview Rd. and Reed Rd.

Columbus, Ohio—Bids will be received until May 5 by the Commissioners of Franklin County for improving Avery Rd. No. 2, Troesch Rd. and Kidner and Taylor Rd. John Scott is Clk. of the Comrs.

Columbus, Ohio—(Official)—Bids will be received until 2 p.m., Apr. 30, by Clinton Cowen, State Highway Comr., for road constructions as follows: Champaign County, Urbana-Sidney Rd., about 5280 lin.ft.; Defiance County, Hicksville-Defiance Rd., about 21,293 lin.ft.; Erie County, Milan-Elryia Rd., about 5280 lin.ft.; Fulton County, Wauseon-Morenci Rd., about 5533 lin.ft.; Greene County, 14,614 lin.ft.; Harrison County, Cadiz-Carrollton Rd., 8412 lin.ft.; Harrison County, Steubenville-Cambridge Rd., 2232 lin.ft.; Highland County, Milford-Hillsboro Rd., 13,178 lin.ft.; Knox County, Columbus-Wooster Rd., 10,800 lin.ft.; Medina County, Medina-Norwalk Rd., 6821 lin.ft.; Medina County, Ashland-Medina Rd., 11,040 lin.ft.; Monroe County, Caldwell-Woodsfield Rd., 6850 lin.ft.; Monroe County, Malaga-Alledonia Rd., 6154 lin.ft.; Paulding County, Paulding-Van Wert Rd., 10,646 lin.ft.; Paulding County, Paulding-Woodburn Rd., 10,354 lin.ft.; Perry County, Logan-New Lexington Rd., 8970 lin.ft.; Portage County, Akron-Youngstown Rd., 9142 lin.ft.; Portage County, Ravenna-Parkman Rd., 16,667 lin.ft.; Putnam County, Van Wert-Ottawa Rd., 10,411 lin.ft.; Richland County, Mansfield-Shelby Rd., 8100 lin.ft.; Richland County, Mansfield-Wooster Rd., 15,560 lin.ft.; Ross County, Chillicothe-Lancaster Rd., 5280 lin.ft.; Ross County, Columbus-Chillicothe Rd., 5280 lin.ft.; Stark County, Akron-Canton Rd., 8300 lin.ft.; Summit County, Akron-Cuyahoga Falls Rd., 2487 lin.ft.; Trumbull County, Warren-Sharon Rd., 12,237 lin.ft.; Trumbull County, Youngstown-Warren Rd., 9650 lin.ft.; also, for repairing the Oberlin-Norwalk Rd., Huron County, 6750 lin.ft., and the Youngstown-Conneaut Rd., Trumbull County, 973 lin.ft.

Lakewood, Ohio—Bids will be received until noon, May 17, by B. M. Cook, Dir. of Finance, for the sale of $100,000 in bonds, the proceeds to be used for paving various streets.

Paulding, Ohio—(Official)—Bids will be received until 2 p.m., Apr. 30, by Edward McGaharan, Audr. of Paulding County, for improving 21,224 lin.ft. of road. This road is known as the Burns Joint County Pike and runs through Paulding and Defiance Counties.

Plain City, Ohio—Bids will be received until Apr. 28 for paving Main St. E. L. Bechtel is Mayor.

Port Clinton, Ohio—(Official)—Bids will be received until 11 a.m., Apr. 26, by D. L. Mackey, Audr. of Ottawa County, for the construction of the Duff Rd.

Gary, Ind.—(Official)—Bids were received Apr. 12 for paving Jackson Ave. from 43d Ave. to 45th St. as follows: Gary Construction Co., $4244; W. F. Brunt, $5048 and $4751 (alternate bid); M. D. Heiny, $4876; W. A. Trinler, $4968; Ingwald Moe, $5251.

Indianapolis, Ind.—The Board of Public Works contemplates paving New York St. from Randolph St. to Tacoma Ave. The estimated cost is $26,632.

Ann Arbor, Mich.—(Official)—Bids will be received until May 5 by the Board of Public Works for laying 20,000 sq.yd. of tar concrete, reinforced-concrete, vitrified brick, asphaltic concrete or bitulithic pavement. Manley Osgood is City Engr.

Jackson, Mich.—(Official)—Bids will be received until 7 p.m., May 4, by the City Commissioners for repaving Main St. from Park Ave. to Jackson St., approximately 15,000 sq.yd., Seymour St. from Main to Ganson St., approximately 3600 sq.yd. A. W. D. Hall is City Engr.

Lansing, Mich.—Bonds for $37,500 have been issued, the proceeds of which will be used for paving streets.

Ypsilanti, Mich.—Bids will be received until 3 p.m., Apr. 28, by the City Clerk for paving Washington, Cross and Michigan St. with concrete.

✚Bloomington, Ill.—The contract for paving Hester, Vernon and Florence Ave. has been awarded to ROY L. WILLIAMS, at $14,781.

Brocton, Ill.—(Official)—All bids received Apr. 12 for road construction in Embarass Township were rejected. Noted Apr. 1.

✚Watseka, Ill.—(Official)—The contract for improving North Fourth, South Fourth and Jackson Ave. has been awarded to M. H. LEWIS, at $13,294.

Janesville, Wis.—Bids will be received about May 1 for paving a portion of Wisconsin St.

✚Marinette, Wis.—The contract for paving Carney Ave. with reinforced-concrete has been awarded to the MURPHY CONSTRUCTION CO., Manitowoc, Wis., at $16,342.

Bemidji, Minn.—Bids will be received until 3 p.m., Apr. 29, by J. L. George, Audr., Beltrami County, for constructing State Rural Highway No. 62.

Duluth, Minn.—The City Commission plans to pave West Seventh St. from O to G Ave.

Duluth, Minn.—The City Council plans to pave various streets. John Wilson is City Engr.

Manhattan, Kan.—Contracts have been awarded to WATTS & AMMERMAN, Concordia, at $49,501, for asphaltic concrete pavement and at $66,232 for brick pavement.

Neodesha, Kan.—(Official)—Bids will be received until 7:30 p.m., Apr. 23, by J. J. Carroll, City Clk., for improving streets.

Newton, Kan.—(Official)—Bids will be received until 10 a.m., Apr. 27, for 33,000 sq.yd. of brick, asphaltic concrete, tar concrete, bitulithic and rock asphalt pavement. F. E. Devlin is City Engr.

★Fargo, N. D.—(Official)—Bids were received Apr. 8 for paving as follows: (a) Broadway, (b) Second Ave., (c) Roberts St., (d) Sixth St., (e) Third St., (f) Roberts St.; S. Birch & Sons, (a) $29,463, (b) $8569, (c) $14,923, (d) $6053, (e) $47,865, (f) $26,679; James Kennedy, (a) $28,000, (b) $7880, (c) $13,773, (d) $5540, (e) $44,173, (f) $24,245; General Construction Co., (a) $31,610, (b) $8668, (c) $15,058, (d) $6212, (e) $48,400, (f) $33,530. Noted Mar. 25.

Kulm, N. D.—Bids will be received until 2 p.m., May 5, by the Board of City Councilmen for concrete sidewalks and crossings during 1915.

Dermott, Ark.—Bonds for $38,000 have been sold, the proceeds of which will be used for constructing concrete sidewalks, curbs and gutters.

Beaumont, Tex.—An election will be held May 20 to vote on the question of issuing $85,000 in bonds, the proceeds to be used for street pavements.

✚Bryan, Tex.—The City Council has awarded the contract for paving Main St. to C. L. BERNEY, Houston, at $21,411.

Cameron, Tex.—At an election held Apr. 8 the citizens voted in favor of issuing $15,000 in bonds, the proceeds of which will be used for street improvements.

Houston, Tex.—The Eureka Paving Co., Houston, at $150,916, was the lowest bidder for paving a portion of Main St. Noted Mar. 25.

Taylor, Tex.—At a recent election the citizens voted in favor of issuing $100,000 in bonds, the proceeds to be used for paving streets. Noted Feb. 25 and Mar. 4.

Lewiston, Idaho—The City Council contemplates paving Ninth St. at an estimated cost of $20,000.

Moscow, Idaho—The City Council plans to pave Polk St. The estimated cost of the work is $10,000.

Sandpoint, Idaho—The City Council plans to construct 22,000 sq.yd. of pavement at an estimated cost of $75,000.

Clifton, Ariz.—Press reports state that the contract will soon be awarded for the construction of a system of good roads in Greenlee County, bonds in the sum of $150,000 having been voted for the purpose. Noted Apr. 1.

Florence, Ariz.—A special election will be held May 1 on the question of issuing bonds for $150,000, the proceeds of which will be used for constructing and improving highways in Pinal County.

Tucson, Ariz.—An election will be held May 15 to vote on the question of issuing $150,000 in bonds, the proceeds of which will be used for constructing roads.

✚Bellingham, Wash.—The contract for paving Monroe St. with asphalt has been awarded to the INDEPENDENT ASPHALT PAVING CO., Seattle, at $17,038.

Chehalis, Wash.—(Official)—Bids were received Apr. 10 by the Commissioners of Lewis County for constructing 1½ miles of concrete road near Curtis, as follows: Jacobson Bade Co., Portland, $12,817; N. P. Willis, Hoquiam, $10,840; Miracle Concrete Co., Kalispell, $10,880; Jarvis & Garvey, Seattle, $10,973; Albers & Son, Chehalis, $10,138; H. C. Detering, Wildwood, $14,298; T. D. Bidwell, Portland, Ore., $9724; John S. Ward, Centralia, $12,324; Albert & James, Centralia, $13,965. Noted Apr. 8.

Ellensburg, Wash.—Bids will be received until May 3 by the Commissioners of Kittitas County for paving the Dollarway Rd., about 2½ miles.

✚**Ephrata, Wash.**—(Official)—Bids were received Apr. 5 for constructing two miles of water-bound macadam highway No. 5 as follows: MOHR CONSTRUCTION CO., Waterville, $4890 (awarded contract); Mitchell-Martin, Spokane, $6467; Dahmen Bros., Burke, $5868; Wilson Bros. Construction Co., Spokane, $8459; Kazee & Preston, Ephrata, $5797. Noted Mar. 11.

✚**Everett, Wash.**—The contract for improving Fulton St. has been awarded to J. B. SNYDER, 1901 Grand Ave., at $6243.

Olympia, Wash.—Bids will be received until 2 p.m., May 3, by William R. Roy, State Highway Comr., for road work as follows: Surfacing with crushed rock three miles Pacific Highway, from Kalama southerly in Cowlitz County; two miles of Pacific Highway, from Carrollton northerly to Cowlitz County; six miles of Pacific Highway from Blaine south in Whatcom County.

North Bend, Ore.—Bids will be received until Apr. 27 by the City Clerk for paving several streets in the business section. Bids will be received on gravel bitulithic, bituminous crushed rock, rock asphalt, sheet asphalt or asphaltic concrete base on 5-in. concrete base. The estimated cost is $16,000.

✚**Yamhill, Ore.**—A contract for surfacing a road with concrete has been awarded to MONTAGUE O'REILLY CO., Portland, Ore., at $8752.

Los Angeles, Calif.—Bids will be received by the Board of Supervisors, until 2 p.m., Apr. 26, for county road improvement in Road District No. 34. The estimated cost is $45,874.

✚**Los Angeles, Calif.**—The CALIFORNIA-ARIZONA CONSTRUCTION CO., 717 Brockman Bldg., has been awarded the contract at $62,671, for improving Western Ave. between Wilshire Blvd. and Washington St.

Riverside, Calif.—Bids will be received by Harry Cree, City Clk., until 5 p.m., Apr. 26, for improving a portion of Seventh St., from Comer to Kansas Ave. and for improving Fairmount Blvd.

Sacramento, Calif.—(Official)—Bids were received Apr. 5 by the State Highway Commission for constructing roads in various counties as follows: (a) Yolo County, Route 6, Section C, (b) Yuba County, Route 3, Section A, (c) Tulare County, Route 4, Section E1, (d) Tulare County, Route 4, Section E2, (e) Orange County, Route 2, Section A, (f) Yolo County, Route 6, Section A: Leffler & Norton, San Francisco, (a) $39,116, (b) $27,933, (f) $44,753; Petersen & Grier, San Francisco, (a) $27,485, (f) $48,115; Tieslau Bros., Berkeley, (a) $31,862, (f) $53,692; Bates, Borland & Ayer, Oakland, (a) $28,553, (f) $49,885; Highway Paving & Construction Co., San Francisco, (a) $32,678, (b) $20,696, (f) $49,709; James Fitzpatrick, Sacramento, (a) $32,165, (f) $42,749; F. Rolandi, San Francisco, (a) $35,249, (b) $27,002, (f) $68,316; L. F. Gerdetz, San Francisco, (a) $28,580, (c) $37,098, (d) $54,297, (f) $58,113; J. Lawrence, Broderick, (a) $24,205, (f) $60,259; E. E. Roddan & Son, Wheatland, (b) $19,986; Mackie & McLean, San Francisco, (c) $39,742, (d) $56,356; George S. Benson & Sons, Los Angeles, (c) $32,542, (d) $41,662; Hoffman & McLaren, Oakland, (c) $32,815, (d) $48,401, (e) $34,386; John D. Marsh, Bakersfield, (c) $41,902, (d) $60,952; Taylor & Berliner, Los Angeles, (c) $34,458, (d) $49,940; W. A. Kettlewell & Sons, Sanger, (c) $29,123, (d) $34,761; J. W. Calback, San Diego, (e) $52,684; James S. Hilend, Anaheim, (e) $36,234; R. H. McGray Co., Los Angeles, (e) $69,492; Robert Sherer, Los Angeles, (e) $34,715; Cahill Bros., Los Angeles, (e) $45,356; Kennedy & Williams, Los Angeles, (e) $48,915; C. L. Hyde Construction Co., San Diego, (e) $41,632; Mahoney Bros. Allison & Cole Construction Co., San Francisco, (e) $53,274; Richard Rathwell, Los Angeles, (e) $60,327; Brashear Burns Co., Los Angeles, (e) $31,633; Doran & Reed, San Diego, (e) $52,187; A. C. McLean Construction Co., San Francisco, (e) $41,240; P. H. Hoare, Hayward, (f) $56,490; T. M. Burns, Sacramento, (f) $51,110; M. Blumenkrantz, Stockton, (f) $44,885; C. H. & A. W. Gorrill, San Francisco, (f) $41,705; Commary Peterson Co., Inc., San Francisco, (f) $62,583; Palmer & McBryde, San Francisco, (f) $41,583; W. A. Hunt & Sons, Alameda, (f) $48,649. Noted Mar. 25.

Sanger, Calif.—The City Trustees have decided to grade, drain and pave a number of streets.

Montreal, Que.—The City Council has appropriated $1,352,363 for laying permanent street pavements, which with $447,867 carried over from last year, makes a total of $1,800,230. The greater part of the paving to be done will be of asphalt.

✚**Vancouver, B. C.**—The contract for paving Marine Drive and other streets has been awarded to COTTON CO.; LTD., at approximately $175,000.

INDUSTRIAL WORKS

✚**Lubec, Maine**—The American Can Co., 10th Ave. and 14th St., New York, N. Y., has awarded the contract for the construction of a three-story, 80x148-ft., reinforced-concrete factory to the H. P. CUMMINGS COAST CO., Ware, Mass. Noted Feb. 1.

Waterville, Maine—(Official)—F. H. Mason, Ch. Engr., Central Maine Power Co., states that the company will not build a storehouse on Lockwood St., as planned. Noted Apr. 15.

✚**Boston, Mass.**—The contract for the construction of a six-story building at Commonwealth Ave. and St. Paul St. for the Youth's Companion Publishing Co. has been awarded to the W. F. KEARNS CO., Cambridgeport. Densmore & Le Clear prepared the plans.

Malden, Mass.—(Official)—The Malden Knitting Mills, 334 Eastern Ave., will construct a 60x160-ft. factory, mill construction, estimated to cost $35,000. E. R. Simpson, 176 Federal St., Boston, Mass., is Arch. Noted Feb. 15.

✚**New Bedford, Mass.**—J. W. BISHOP CO., 109 Foster St., Worcester, Mass., has been awarded the contract for the construction of a 140x160-ft. brick mill and a 100x120-ft., three-story brick addition to the present storehouse. The contract involves $150,000.

✚**Fairfield, Conn.**—The contract for the construction of a two-story brick and steel factory for Hanley & Harmon, 202 John St., Bridgeport, Conn., has been awarded to LEVERING & GARRIGUES, 552 West 23d St., New York, N. Y. The estimated cost is $100,000.

New Britain, Conn.—The Hart & Cooley Co. has obtained a permit and will build a two-story addition to its plant. The cost will be $15,000.

New Haven, Conn.—McClintock & Craig, Arch., Springfield, Mass., has prepared plans for the construction of a 60x100-ft., four-story, reinforced-concrete plant for the Kolynos Co., Bristol St. Noted Feb. 15.

✚**Unionville, Conn.**—The American Writing Paper Co. has awarded the contract for the construction of two additions to its plant to P. J. KENNEDY, INC., Holyoke, Mass.

✚**Buffalo, N. Y.**—The Curtis Aëroplane Co. has awarded the contract to the FERGUSON STEEL & IRON CO. for the construction of the 100x300-ft. second building of its plant at Churchill St. and the N. Y. C. R.R. It will cost $75,000.

✚**Hammondsport, N. Y.**—The CORNING BUILDING CO., Corning, N. Y., has been awarded the contract for the construction of a two-story, 41x130-ft. machine shop for the Curtis Aëroplane Co.

Jamestown, N. Y.—J. P. Sheldon & Sons, Arch., Industrial Trust Bldg., Providence, R. I., has plans in progress for the construction of a plant for the Gurney Ball Bearing Co.

✚**New York, N. Y.**—(Borough of Bronx)—JOHN MacADAM & CO., 29 West 34th St., has been awarded the contract for the construction of a two-story, 50x200-ft. brick garage at 966 Prospect Ave., for the Prospect Garage Co. Benjamin W. Levitan, 20 West 31st St., is Arch. The estimated cost is $50,000.

New York, N. Y.—(Borough of Brooklyn)—THOMAS DRYSDALE, 26 Court St., has been awarded the contract for the construction of an addition to the cold-storage warehouse at 62 Furnam St., for the National Cold Storage Co. H. P. Henschien, 431 South Dearborn St., Chicago, Ill., is Arch. The cost is estimated at $30,000.

✚**New York, N. Y.**—(Borough of Brooklyn)—Frank S. Aliano, 4518 Sixth Ave., has awarded the contract for the construction of a two-story, 80x100-ft. factory at 44th St. and Third Ave. to CALENDO & CORDI, 6005 14th Ave. It will cost $15,000.

New York, N. Y.—(Borough of Brooklyn)—Bids will be received until Apr. 24 by Albert Ullrich, 367 Fulton St., for alterations to the four-story dairy, pasteurizing plant and office building of R. F. Stevens Co., Dean St. and Third Ave. George Sloughter is Pres. It will cost $120,000.

New York, N. Y.—(Borough of Brooklyn)—The American Machine & Foundry Co., 346 Carroll St., will construct a five-story, 100x700-ft. brick and reinforced-concrete factory and power house at 56th St. and First Ave., to cost $500,000. Francisco & Jacobus, 200 Fifth Ave., is Arch.

✚**New York, N. Y.**—(Borough of Manhattan)—Burton Bros. & Co., 384 Broadway, has awarded the contract to the E. BROOKS CO., 3 West 39th St., for the construction of an 11-story building. Starrett & Van Vleck, Everett Bldg., is Arch.

New York, N. Y.—(Borough of Manhattan)—The following bids were received by the Harlem Hospital, 137th St. and Lenox Ave., for the construction of a machine room, coal vault and storage room: Moreland Operating Co., $13,350, B. Diamond, $13,729; N. B. Smyth, $14,575; P. F. Brennen, $14,925; C. L. Dooley, $14,767; W. Flanagan, $13,500; P. F. Kenny, $13,500; W. H. Egan, $13,996; E. D. Broderick, $12,856; M. J. Marshall, $13,700; G. Rohrer, $16,100; Andrews Building Co., 348 East 54th St., $12,666.

New York, N. Y.—(Borough of Queens)—Sheffield Farms-Slawson-Decker Co. will construct a two-story, 104x150-ft. brick stable and milk depot at the northwest corner of Webster and Seventh Ave., Long Island City, to cost $50,000.

New York, N. Y.—(Borough of Queens)—William De Muth & Co. will build a four-story, 104x126-ft. brick factory and garage on Park Ave., Richmond Hill, to cost $75,000.

Port Chester, N. Y.—The chemical laboratories of Wilfred Hall, recently destroyed by fire, will be rebuilt. The estimated cost is $40,000.

Yonkers, N. Y.—James A. Watson, Arch., 34 Warburton Ave., has completed plans and is receiving bids for the construction of a three-story addition to the cold-storage plant of H. Steinmetz on School St. It will cost $18,000.

North Tonowanda, N. Y.—The Tonawanda Power Co. will build an 80x120-ft. brick warehouse on Robinson St. to cost $20,000.

Syracuse, N. Y.—(Official)—The H. H. Franklin Mfg. Co. will build a three-story, 53x100-ft. reinforced-concrete and brick addition to its plant on Gifford and Magnolia St., to cost $65,000. Gordon Wright is Arch. Noted Apr. 15.

Hoboken, N. J.—The Interstate Shade Cloth Co. will construct a factory at Eighth and Madison St. Robert Wilson, New York, N. Y., is Pres.

✚**Jersey City, N. J.**—(Official)—Colgate & Co. has awarded the contract to the TURNER CONSTRUCTION CO., 11 Broadway, New York, N. Y., for the construction of a 96x200-ft., eight-story, reinforced-concrete warehouse and manufacturing building at Greene and York St. Warren Davey is Arch.

Jersey City, N. J.—William A. Boggart, Arch., 298 Jackson Ave., has completed plans for the construction of a three-story, 38x100-ft. factory at Brooks and Center St. for Campanello & Favaro Co., 424 Second St., to cost $40,000.

✚**Newark, N. J.**—The C. H. Stuart Co. has awarded the contract to the F. H. JOHNSON CONSTRUCTION CO. for the building of a two-story, 60x100-ft. factory with a 30x30-ft. wing. The estimated cost is $25,000.

✚**Monongahela, Penn.**—The contract for the construction of the reinforced-concrete cold-storage plant for the Universal Ice & Cold Storage Co. has been awarded to E. ELFORD, Ruggery Bldg., Columbus, Ohio. Noted Dec. 24, 1914.

Philadelphia, Penn.—Charles Gans will build a 59x128-ft., two-story factory at Hancock St. and Columbia Ave., to cost $13,000.

Philadelphia, Penn.—The Millbourne Storage Co., 4950 Folsom St., will build a three-story, 117x127-ft. brick warehouse at 657 North 42nd St. J. C. Norton is Arch.

York, Penn.—The Standard Chain Co., Marion, Ind., will build a 78x400-ft. chain-forming department, a 176x320-ft. welding and shipping department and a 45x60-ft. office building, al lof brick and steel.

Roanoke, Va.—The Citizens' Crystal Ice Co. will build a 100x150-ft. storage warehouse and two smaller storage buildings.

✝Asheville, N. C.—The French Broad Mfg. Co. has awarded the contract to T. C. THOMPSON & BROS., Birmingham, Ala., and Charlotte, N. C., for the construction of a two-story, 104x169-ft. mill and a 100x100-ft. reinforced-concrete warehouse. Lockwood, Greene & Co., Boston, Mass., is Arch.

Bainbridge, Ga.—The Elberta Crate Works, Marshallville, Ga., will build an additional factory at an estimated cost of $100,000.

✝La Grange, Ga.—The Hillside Cotton Mills has awarded the contract to T. C. THOMPSON & BROS., Charlotte, N. C., for the construction of a three-story mill, 19 warehouses, an engine house, a boiler house and 122 cottages.

Birmingham, Ala.—The Birmingham Ice Factory Co. will build a brick and reinforced-concrete cold-storage plant at Ave. E and 23rd St. The estimated cost is $75,000. W. J. Rushton is Pres.

Woodward, Ala.—The Thomas A. Edison Co., Orange, N. J., will construct a benzol-absorbing plant at a cost of $60,000.

Gallatin, Tenn.—The Upper Cumberland Loose Leaf Tobacco Warehouse Co. has purchased a frontage on the L. & N. R.R. and will build a 98x200-ft. warehouse.

Mascot, Tenn.—The American Zinc Co. will build an addition to its plant to cost $75,000.

Newport, Ky.—A permit has been issued to the Newport Rolling Mill Co. to build a 180x600-ft. addition to its galvanizing plant. It will cost $40,000.

Cincinnati, Ohio—The R. K. Le Blond Co. has been granted a permit to construct an addition to its plant in the East End. It will cost $14,000.

Cleveland, Ohio—The Cleveland Metal Products Co., 1794 East 55th St., has secured a permit and will build an addition to its factory to cost $17,500. George S. Rider & Co., Century Bldg., is Arch.

✝Cleveland, Ohio—The contract for the construction of a four-story addition to the plant of the Theurer Norton Provision Co., Stock Ave., has been awarded to the ANDREWS BROS. CONSTRUCTION CO., 130 B. & L. E. Bldg.

✝Cleveland, Ohio—The American Shipbuilding Co., A. G. Smith, Gen. Mgr., 2107 Superior Ave., has awarded the contract to CROWELL-LUNDOFF-LITTLE CO., 1951 East 57th St., for the construction of a two-story, 100x200-ft. factory to cost $80,000, and a one-story, 120x320-ft. machine shop, to cost $100,000.

Columbus, Ohio—The Solar Metal Products Co., Chicago, Ill., has purchased a site at Third and Cleveland Ave., on which it will construct buildings to cost $50,000.

Columbus, Ohio—S. T. Budd Dairy Co., 1390 Wesley Ave., will build a dairy plant at Fourth St. and Fourth Ave. The estimated cost is $30,000. Reibel & Sons is Arch.

St. Bernard, Ohio—(Cincinnati post office)—The Globe Soap Co. will build a two-story, 100x200-ft. addition to its factory, to cost $40,000.

Toledo, Ohio—The Landers Bros. Co., Buckeye St., will construct a two-story factory on Buckingham St., to cost $35,000. W. S. Thursten is Arch.

Toledo, Ohio—W. S. Thurston, Arch., 905 Ohio Bldg., has prepared plans for an 80x196-ft., two-story factory to cost $50,000.

✝Toledo, Ohio—The Libby Glass Co., Ash St., E. D. Libbey, Pres., has awarded the contract for the construction of a two-story, 60x140-ft. factory to SPEAR, MOYLAN & LASKEY, Sycamore and Water St. Dover & McGormley, 304 Nasby Bldg., is Arch. It will cost $55,000.

✝Toledo, Ohio—SETTINS & KOPITKE, 6 Messenger Bldg., has been awarded the contract for the construction of a one-story, 34x60-ft. factory for Gordon Mather, Castle Blvd., estimated to cost $60,000. Mills, Rhines, Bellman & Nordorff, 1234 Ohio Bldg., is Arch.

✝Toledo, Ohio—H. J. SPIEKER CO., 409 Michigan Ave., has been awarded the contract to construct a one-story, 56x330-ft. factory for the National Supply Co., 136 Huron St., estimated to cost $60,000. Mills, Rhines, Bellman & Nordorff is Arch.

Youngstown, Ohio—Joseph Bros. & Co., 1242 Harrison Ave., Cincinnati, Ohio, has secured a site on Cedar St. and will build a steel fabricating plant, at an estimated cost of $200,000. Maurice Joseph is Vice-Pres.

Bloomington, Ind.—The Nurre Mirror Plate Mfg. Co. has had plans prepared for the construction of an addition to its plant to cost $50,000. J. N. Nurre is Pres.

Detroit, Mich.—Several commission houses are behind a project to erect a cold-storage plant on Fort St., which will cost $600,000. F. J. Rogers, of the Board of Commerce, is interested.

✝Detroit, Mich.—The Remy Electric Co., 1005 Woodward Ave., has awarded the contract for the construction of a two-story, 60x150-ft. factory to A. A. ALBRECHT & CO., 820 Penobscott Bldg. It will cost $100,000. Smith, Huchman & Fryils is Arch. Noted Jan. 21.

Detroit, Mich.—Albert Kohn & E. Wilby, Arch., Trussed Concrete Bldg., has prepared plans for a three-story, 80x400-ft. factory for the Packard Motor Car Co., Grand Blvd. and Belt Line R.R. The estimated cost will be $100,000.

Duluth, Minn.—The Expansion Bolt Co. plans the construction of a factory at 40th Ave. and the North Pacific R.R., to cost $10,000. W. A. Anton is Secy.

Minneapolis, Minn.—The Wheeling Corrugating Co., Wheeling, W. Va., plans the construction of a plant and distributing station at University and Washington Ave.

Minneapolis, Minn.—The Lathrop Kemp Ice Cream Co. will build a two-story brick factory at 7 Royalston Ave., to cost $30,000.

Minneapolis, Minn.—R. W. Munzer & Sons will build a four-story automobile sales building at 907 Hennepin Ave.

St. Cloud, Minn.—The milling plant of the George Tileston Co., which was destroyed by fire, will be rebuilt by the Northern Flour Mills Co., at an estimated cost of $60,000.

Jefferson City, Mo.—John P. Gordon, State Audr., announces that the prison building twine plant will be enlarged.

Dallas, Tex.—The Consumers' Ice Co. was incorporated with $40,000 to establish an ice and cold-storage plant.

✝Ft. Worth, Tex.—B. F. DAVIS & C. M. DAVIS has been awarded the contract for the construction of a three-story, 50x142-ft. warehouse for the Ft. Worth Warehouse & Transfer Co., Dagett and South Calhound St. It will cost $30,000.

Pharr, Tex.—Henry M. Pharr, Berwick, La., plans to build an alfalfa feed mill and dryer, with 400 tons daily capacity. The estimated cost is $35,000.

Murray, Utah—Jones & Olsen has had plans prepared by N. Edward Liljenberg, Arch., for the construction of a planing mill to cost $30,000.

Silver City, Utah—The Knight-Christensen Mill will rebuild its plant which was partially destroyed by fire at a loss of $75,000.

Spokane, Wash.—Plans have been completed and bids will be received by W. P. Fuller & Co. for the construction of a warehouse to cost $75,000. P. C. Patterson is Mgr.

Spokane, Wash.—H. I. Somers Co. will build a manufacturing plant. W. B. Thos, Mgr., will have charge of the construction.

Tacoma, Wash.—The Tacoma Japanese Association, S. Shibagaki, Secy., plans the construction of a $40,000 knitting mill.

Avon, Calif.—The Associated Oil Co. will build two additional units to its refinery at a cost of $50,000.

Bakersfield, Calif.—The Independent Ice Co. will build a plant at 15th and N St., at an estimated cost of $40,000. E. S. Cole is Engr.

Los Banos, Calif.—M. A. Bettencourt is interested in a plan to construct a creamery at a cost of $40,000.

✝San Francisco, Calif.—The Seattle Brewing & Malting Co. has awarded the contract for the construction of a brewery on Bryant St. to the SOUND CONSTRUCTION CO., at $538,913.

London, Ont.—P. A. Seeker, Marine City, Mich., has purchased a three-acre site and will build an automobile factory to cost $65,000.

FEDERAL GOVERNMENT WORK

A recent low bid was rejected because it was unaccompanied by a certified check. In the future, the office of the Supervising Architect will be most strict about certified checks.

Improvements—Post Office and Court House—Auburn, N. Y.—Bids will be received until 3 p.m., May 15, by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., for extensions and remodeling the plumbing in the post office and court house.

★Dredging—Buffalo, N. Y.—Bids were received Apr. 15 by Capt. L. V. Frazier, Buffalo, for dredging the Niagara River as follows: H. S. Kerbaugh, Inc., Buffalo, $44,100; Great Lakes Dredge & Dock Co., Buffalo, $41,475; Duluth Marine Contracting Co., Duluth, Minn., $39,900, and Arthur E. Breymann, Toledo, Ohio, $38,850 (recommended for award). Noted Mar. 18.

✝Post Office—Plainfield, N. J.—The contract has been awarded to CHARLES GILPIN, Philadelphia, Penn., at $84,556, for constructing a post office at Plainfield. Noted Feb. 25 and Apr. 8.

Post Office—Smyrna, Del.—All bids received by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., for constructing a post office at Smyrna have been rejected. Noted Feb. 8 and Apr. 1.

✝Experiment Station—Pittsburgh, Penn.—Contracts have been awarded for constructing the experiment station for the Bureau of Mines to GEORGE B. WILLS, 103 Park Ave., New York, N. Y., at $287,540, for construction work and to C. A. RIFFLE, 421 Wood St., Pittsburgh, at $27,242, for excavation. Noted Mar. 18.

Building—Beltsville, Md.—Bids will be received until 2 p.m., Apr. 30, by D. F. Houston, Secy. U. S. Dept. of Agriculture, Washington, D. C., for constructing a two-story brick and concrete building at the U. S. experimental farm, Beltsville.

Dormitory—Washington, D. C.—Bids were received Apr. 10 by the Commissioner of Indian Affairs, Washington, D. C., for constructing three adobe buildings at the San Xavier Indian School, Ariz., as follows: W. D. Lovell, Minneapolis, Minn., $22,000; J. W. Tucker, 1201 East Pierce St., Phoenix, Ariz. $31,900; F. J. Odermatt & Co., Tuscon, Ariz., $34,701; Charles F. Odam, 716 East McKinley St., Phoenix, Ariz., $27,000 and Chute & Heller, 9 West Broadway, Tuscon, Ariz., $30,300.

Building—Washington, D. C.—Bids were received Apr. 16, by the Commissioners of the District of Columbia for the construction of a 16-room school, No. 175, located in square No. 3033, Warder St., N. W., as follows: W. E. Mooney, $145,962; Andrew Murray, $142,700; Irwin & Leighton, Philadelphia, Penn., $128,400; Richardson & Burgess, Inc., $135,569; King Lumber Co., Charlottesville, Va., $127,000; George A. Fuller Co., $126,500; Wells Bros., New York, N. Y., $120,000; Frank L. Wagner, $144,860; Connors Bros., Co., New York, N. Y., $148,390;

J. H. Pierce, Norfolk, Va., $124,200; Arthur Cowsill, $138,434; P. J. Gormley Co., $127,000. Above bidders of Washington, unless otherwise specified. Noted Apr. 8.

Building—Washington, D. C.—Bids were received Apr. 9 by the District Commissioners for constructing a residence at the Tuberculosis Hospital, Washington, as follows: Arthur L. Smith & Co., Washington, D. C., $7648; Henry B. Davis, Washington, D. C., $7900; S. A. Gaskins & Son, Washington, D. C., $7496; Michael A. Angelo, Washington, D. C., $7824; A. M. Poynton, Washington, D. C., $8250 (bid not signed); Skinker & Garrett, Washington, D. C., $7777; Andrew Murray, Washington, D. C., $8675; Charles J. Cassidy & Co., Inc., Washington, D. C., $8833, and William E. Mooney, Washington, D. C., $7199. Noted Apr. 8.

Grading—Washington, D. C.—Bids were received Apr. 13 for grading the west approach to the Q St. bridge as follows: George Hyman, $0.285; J. B. Latimer, $0.395, and William F. Cush, $0.28. All bidders are of Washington. Noted Apr. 8.

Heating System—Washington, D. C.—Bids will be received until 11 a.m., May 8, by H. R. Stanford, Ch. of Bureau of Yards and Docks, Washington, D. C., for a steam and hot water distributing system, gas and cold water pipe and a hot water heater at the U. S. Naval Hospital Reservation, Washington.

★**Lanterns**—Washington, D. C.—Bids will be received until noon, May 18, by the Chief, U. S. Weather Bureau, Dept. of Agriculture, Washington, D. C., for storm-warning lanterns, f.o.b., factory.

Building—Radio, Va.—Bids were received Apr. 17 by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for constructing an office building at the Radio Station as follows: Skinker & Garrett, 1413 H St., $16,969; W. E. Mooney, Evans Bldg., $16,966; James L. Marshall, 700 Tenth St., $17,000; William P. Lipscomb & Co., 1405 F St., $18,383; Henry B. Davis, 813 14th St., $19,593; William H. Egan, 147 East 121st St., New York, $21,999; Richardson & Burgess, Inc., 1413 H St., $17,330; Michael A. Weller, 629 F St., $18,149; W. H. McCray, Bond Bldg., $18,165; Darby & Pettit, 3009 O St., $20,000; John H. Noland Construction Co., Munsey Bldg., $18,243. All of Washington, unless otherwise specified. Noted Feb. 25 and Apr. 8.

Building and Alterations—Pensacola, Fla.—Bids will be received until 11 a.m., May 1, by H. R. Stanford, Ch. of Bureau of Yards and Docks, Washington, D. C., for toilet building and alterations in buildings Nos. 16, 18 and 34 at the Navy Aëronautic station.

Macadam Road—Pensacola, Fla.—Bids will be received until 11 a.m., May 1, by H. R. Stanford, Ch. of Bureau, Yards and Docks, Navy Dept., Washington, D. C., for constructing a macadam road at the navy yard, Pensacola.

✚★**Steel Gates**—Nashville, Tenn.—Bids were received Apr. 12 by Maj. H. Burgess, Nashville, for constructing and erecting steel gates for locks B and C, Cumberland River, as follows: PENNSYLVANIA BRIDGE CO., Beaver Falls, Penn., $23,540 (awarded contract); Lupfer & Remick, 594 Ellicott Sq., Buffalo, N. Y., $25,800; Union Foundry & Machine Co., West Carson St., Pittsburgh, Penn., $27,705; Chicago Bridge & Iron Co., 105th and Troop St., Chicago, Ill., $30,600; L. D. Weaning, c/o Variety Iron & Steel Co., Cleveland, Ohio, $59,820; The Alliance Structural Co., Alliance, Ohio, $27,200; The Whitehead & Kales Iron Works, Detroit, Mich., $26,070; Foster & Creighton Co., Nashville, $27,200; Milwaukee Bridge Co., Milwaukee, Wis., $225,494; Louisville Bridge & Iron Co., Louisville, Ky., $24,290; Nashville Bridge Co., Nashville, $31,700, and the Independent Bridge Co., Pittsburgh, Penn., $25,258. Noted Mar. 18.

★**Breakwater**—Marble Head, Ohio—Bids will be received until 2 p.m., by Capt. E. P. Bertholf, U. S. Coast Guard, Washington, D. C., for constructing a rubble mound breakwater at the Marblehead Coast Guard station, Marblehead, Ohio.

Post Office—La Salle, Ill.—Bids will be received until 3 p.m., May 26, by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., for the construction complete of the U. S. post office at La Salle.

Remodeling Post Office—Des Moines, Iowa—All bids received Mar. 23 for remodeling the U. S. post office and court house at Des Moines have been rejected. Noted Feb. 18 and Apr. 1.

★**Dipper Dredge**—Duluth, Minn.—Bids were received Mar. 26 by Maj. E. D. Feek, Duluth, for (a) contractor's own design, afloat, dredge, Col. D. D. Gaillard, (b) specified dredge, (c) contractor's own design, Duluth, (d) specified dredge, afloat, Lake Superior, as follows: Marion Steam Shovel Co., Marion, Ohio, (a) $107,050, (b) $110,050, (c) $107,050, (d) $110,050; Bucyrus Co., South Milwaukee, Wis., (b) $136,075, (c) $135,225; Dubuque Boat & Boiler Works, Dubuque, Iowa, (c) $118,693; Hartmann-Greiling Co., Green Bay, Wis., (a) $87,400, (b) $104,823 (recommended for acceptance), (c) $87,823, (d) $104,400 (recommended for acceptance); and National Iron Co., Duluth, Minn., (a) $146,759, (d) $146,759. Noted Feb. 25.

Post Office and Court House—Chillicothe, Mo.—Bids will be received until 3 p.m., June 3, by James A. Wetmore, Act. Superv. Arch., Treasury Dept., Washington, D. C., for constructing complete (including mechanical equipment and approaches) of the U. S. Post Office and Court House at Chillicothe.

✚**Sewer System**—Phoenix, Ariz.—The contract has been awarded to THOMAS M. TORSON, Kansas City, Mo., at $22,347, for constructing a sewer system at the Phoenix Indian School and Sanitorium. Noted Mar. 4.

Dormitory—Cherokee, Okla.—Bids will be received until 2 p.m., May 5, by Cato Sells, Comr. of Indian Affairs, Washington, D. C., for constructing a dormitory at the Cherokee School, Cherokee, Okla.

★**Canal Work**—Payson City, Utah—Bids will be received until 2 p.m., May 19, by the U. S. Reclamation Service, Provo, Utah, for about 30,000 yd. of canal excavation and 3400 yd. of reinforced concrete.

Bridge—Ashford, Wash.—Bids will be received until 2 p.m., May 4, by Mark Daniels, Gen. Supt. of National Parks, Monadnock Bldg., San Francisco, Calif., for constructing a reinforced-concrete bridge over Tahoma Creek in the Mount Ranier National Park.

Stone—Lone Tree, Wash.—Bids will be received until noon, Apr. 28, by Lieut.-Col. J. B. Cavanaugh, Burke Bldg., Seattle, Wash., for furnishing stone for jetty construction at Lone Tree, Gary's Harbor.

Light Station—Cape St. Elias, Alaska—Plans are under way for the construction of a light station for Cape St. Elias, Alaska.

MISCELLANEOUS

Wharves—Portland, Maine—According to press reports, the Sebago Ice Co. and the Portland Products Co. have been granted permission by the Harbor Commissioners to extend their present wharves and construct new ones.

Dredging—Boston, Mass.—The following are the bids received for dredging about 26,000 cu.yd. in Deacon's Pond Harbor, Falmouth: Eastern Dredging Co., (a) 26¾c. per cu.yd. for ordinary dredging, (b) $9.50 per cu.yd. for rock; John R. Burke, (a) 32.7c., (b) $10; J. S. Packard Dredging Co., (a) 33.9c., (b) $8. William F. Williams is Ch. Engr. Noted Apr. 8.

Terminal—Fall River, Mass.—The Ways and Means Committee of the Legislature is considering a bill appropriating $350,000 for terminal work. William H. Hart is Secy., Chamber of Commerce.

✚**Seawall**—Scituate, Mass.—The contract for constructing a concrete seawall between the first and second cliffs at Scituate has been awarded to LOSI & WILLIAMS, at $5.24 per cu.yd. for cement and 85c. per lin.ft. for riprap. William F. Williams is Ch. Engr. Noted Apr. 1.

Fire Station—Pawtucket, R. I.—The city will construct a fire station on Hope St. Charles H. Learned is Arch. Giles W. Esterbrook is Mayor.

Canal Improvements—Albany, N. Y.—A bill has been signed by the Governor appropriating $150,000 for repairing and improving mechanical and other structures connected with the state canals.

★**Wharf**—Dunkirk, N. Y.—(Official)—Bids will be received by A. D. Toomey, City Clk., until 8 p.m., May 18, for the construction of a public wharf.

Subway—New York, N. Y.—(Borough of Brooklyn)—(Official)—The following are the unofficial totals of the bids received by the Public Service Commission for the construction of Section No. 2 of Route No. 12, that part of the Eastern Parkway between Prospect Park Plaza and a point 635 ft. east of the center line of Nostrand Ave., including a spur curving southeasterly for connection with the Nostrand Ave. subway. The plans call for a subsurface railroad with four tracks, to be built largely on the double-deck plan. The bidders follow: Inter-Continental Construction Co., 26 Cortlandt St., New York, $2,734,000; H. P. Converse & Co., $2,810,000; Tidewater Building Co., $2,810,000; Newman & Carey, $2,812,000; Bayly Hopkins, $2,823,000; Charles Cooper, $2,854,000; Underpinning & Foundation Co., $2,938,000; Degnon Contracting Co., $3,049,000; T. A. Gillespie Co., $3,064,000; Norton & Gorman Contracting Co., $3,145,800; Oscar Daniels Co., $3,,347,000; Dock Contractor Co., $3,357,000; E. E. Smith Contracting Co., $3,359,000; Mason & Hanger, $3,408,000; Rodgers & Hagerty, Inc., $3,415,000; Arthur McMullen, $3,600,000; W. H. Gahagen, $3,710,000; John T. Green, $3,757,000; Smith, Hauser & MacIsaac, Inc., $3,860,000. Noted Apr. 1.

Motor Trucks—New York, N. Y.—(Borough of Manhattan)—(Official)—Bids will be received by Robert Adamson, Fire Comr., Municipal Bldg., until 10:30 a.m., Apr. 27, for furnishing and delivering 12 motor driven city service hook and ladder trucks.

Markets—New York, N. Y.—According to press reports an announcement has been made by the New York State Department of Foods and Markets that four terminal markets will be built as follows: One by the Long Island R.R. Co. on Dutch Kills Canal and Newtown Creek, Long Island City; a second by the Bush Terminal Co. on its property in South Brooklyn; a third by the New York Central & Hudson River R.R. Co. at 34th St. and 11th Ave. and another in the Borough of the Bronx, by the New York, New Haven & Hartford R.R. Co.

Track Equipment—New York, N. Y.—(Borough of Manhattan)—(Official)—The following are the bids received for the equipment of the westerly tracks of the upper deck of the Manhattan Bridge: Cullen Chambre Construction Co., $186,816; Charles Meade & Co., $159,186; Snare & Triest Co., $171,685; Wilson & English Construction Co., $180,243; Simon Russick, $159,221; McHarg Barton, $204,393; N. E. Construction Co., $156,342; Lord Construction Co., $170,688; Vulcan Rail & Construction Co., 35 Meserole St. (Borough of Brooklyn), $148,393; T. Crimmins Contracting Co., $224,276. Noted Apr. 8.

★**Fence**—New York, N. Y.—(Official)—See item under "Water Supply-Irrigation."

✚**Subway**—New York, N. Y.—(Borough of Manhattan)—(Official)—The contract for the construction of Section No. 4 of Routes Nos. 4 and 36, that part of the subway lying in Seventh Ave. between 51st and 59th St., has been awarded to the LITCHFIELD CONSTRUCTION CO., 23 Flatbush Ave. (Borough of Brooklyn), at $1,937,509. Noted Apr. 1 and 15.

★**Hardware**—Syracuse, N. Y.—(Official)—Bids will be received by Hugh P. Baker, Dean, Lyman Hall, Syracuse University, until 2 p.m., Apr. 22, for furnishing hardware for the forestry building.

Park Improvements—Camden, N. J.—A bill has passed the City Council, appropriating $35,000 for park improvements. L. E. Farnham is City Engr.

★✚**Boardwalk, Repairs and Beach Protection**—Cape May, N. J.—The contract for constructing additional boardwalks, bulkheads and beach protection has been awarded to the ATLANTIC CONSTRUCTION CO., Atlantic City, at $55,489. Noted Mar. 18 and Apr. 1.

Pier Extension—Jersey City, N. J.—The Central R.R. of N. J. plans to extend its piers in Jersey City on the Hudson River and upper New York Bay. The estimated cost is $175,000.

Fire Station—Newark, N. J.—The Board of Chosen Freeholders has authorized a bond issue of $30,000 to be used for

the construction of a fire station at Overbrook Hospital. Bids for the structure will soon be advertised.

✚Ditches—Rutherford, N. J.—The contract for excavating about 225,000 lin.ft. of ditches in Rutherford, East Rutherford, Union Township, North Arlington, has been awarded to the U. S. DRAINAGE & IRRIGATION CO., 17 Battery Pl., New York, N. Y., at $42,875.

★Rock Tunnel—Drums, Penn.—(Official)—Bids will be received by the Vice-President and General Manager, Lehigh Valley Coal Co., 133 North River St., Wilkes-Barre, Penn., for driving a rock tunnel, minimum cross-section to be 7x9 ft., with a ditch 3 ft. wide by 2 ft. deep; approximate length of tunnel, 19,500 ft. The south portal will be in the Buck Mountain vein gangway of Hazle Mines, and the north portal of the tunnel will be on the Little Nescopeck Creek, near the village of Drums.

Jetties—Trenton, N. J.—The Central R.R. of N. J. has received permission to construct jetties at Sea Bright and along the coast to Hollywood. It is proposed to build 34 jetties at $4000 each.

✚Wharf—New Orleans, La.—The Port Commissioners have awarded the contract for constructing the wharf at the Valence St. landing to DOULLUT & CO., at $194,600.

★Doors—New Orleans, La.—(Official)—Bids will be received by Ernest M. Loeb, Pres., Bd. of Comrs., New Orleans Court Bldg., until 8 p.m., Apr. 28, for furnishing and installing fire doors and steel rolling doors etc., for the cotton warehouses and terminal now under construction on the East Bank of the Mississippi River near Valence St.

Drainage—Plain Dealing, La.—Bids will be received by the Commissioners, North Bossier Levee District, until Apr. 21, for improving drainage in Posten and Phelps Lake, Bossier Parish. J. Perry is Secy. of the Comrs. F. B. Grevemberg, Jr., Continental Bank Bldg., Shreveport, La., is Engr.

✚Drainage—Dresden, Tenn.—(Official)—The contract has been awarded by the Commissioners of the Middle Fork and Spring Creek Drainage and Levee District No. 1 of Weakley County to R. H. & G. A. McWILLIAMS, Memphis, Tenn., for 676,000 cu.yd. of levee embankment and 543,000 cu.yd. of ditch excavation, at $122,059. The contractor purchased the bonds at par. The Morgan Engineering Co., Memphis, Tenn., is Engr. Noted Mar. 18.

Ditches—Dyersburg, Tenn.—(Official)—Bids will be received until May 14, by the Directors, Reeds Creek Drainage District, Dyer County, for the construction of about 15.4 miles of ditches, requiring the excavation of about 660,000 cu.yd. of earth. The Morgan Engineering Co., Memphis, Tenn., is Engr.

Drainage—Paducah, Ky.—The Department of Agriculture has commissioned F. F. Shafer, Louisville, Ky., to survey the Mayfield Creek Drainage District, for the purpose of submitting an estimate to the County Court, of the cost of draining the creek.

Elimination of Grade Crossing—Alliance, Ohio—(Official)—The following are the bids received by the Director of Public Service in connection with the construction of a reinforced-concrete subway under the tracks of the Pennsylvania R.R. at Arch St. This work includes principally water, sewer and road improvements: Portage Engineering Co., Akron, Ohio, (a) with two-ring brick sewer, $17,235, (b) with segment-block sewer, $17,082; F. A. Downs, Canton, Ohio, (a) $15,745, (b) $16,127; J. C. Devine, Alliance, (a) $20,619, (b) $20,466; J. B. Sheets Co., (a) $18,539, (b) $18,386; Central Ohio Construction Co., (a) $18,637, (b) $17,260; Laidlaw Bros. (a) $23,894, (b) $25,424; Adam Laidlaw & Co., (a) $27,278, (b) $26,885; Monongahela Construction Co., (a) $28,939, (b) $29,398; William McDowell & Son Co., (a) $19,586, (b) $19,280; Duquesne Contracting Co., (a) $28,521, (b) $27,297; P. T. McCourt, (a) $21,307, (b) $19,899; A. L. Anderson & Bros., (a) $26,361, (b) $27,891.

Bids received by the Pennsylvania R.R. in connection with this work, which provides only for excavation and concrete work, were as follows: J. C. Herndon, $9190; F. A. Downs Construction Co., $9200; J. B. Sheets Co., $9380; Jones Construction Co., $10,000; A. L. Anderson & Bros., $10,980; H. A. & R. L. Culbertson Co., $10,990; J. C. Devine Co., $11,100; Laidlaw Bros., $11,160; Adam Laidlaw & Co., $11,210; Robert Grace Contracting Co., $11,400; Pihl & Miller, $11,420; P. T. McCourt, $11,840; Ferguson & Edmondson Co., $13,000; Duquesne Contracting Co., $14,860; Rust Engineering Co., $15,390; Monongahela Construction Co., $15,980; C. H. Strong & Son, $21,500. Noted Mar. 25.

Park Improvements—Bratenahl, Ohio—(Cleveland post office)—Bids will be received until noon, May 1, by C. A. Neff, Clk., 219 East 105th St., for the sale of $60,000 in bonds, the proceeds to be used for park improvements.

Signalling System—Bratenahl, Ohio—(Cleveland post office)—Bids will be received until noon, May 1, by C. A. Neff, Clk., 219 East 105th St., for installing and constructing a combination police, telegraph and recall signalling system.

Dredging—Canton, Ohio—The City Council contemplates dredging East Creek. William E. Sarver is City Engr.

Park Improvements—Cleveland Heights, Ohio—(Cleveland post office)—A special election will be held May 17 for the purpose of voting $100,000 in bonds, the proceeds to be used for park improvement and construction work. H. H. Canfield is Clk.

Amusement Structure—Cleveland, Ohio—The Luna Park Amusement Co., Cleveland, will erect a $40,000 amusement structure. C. X. Zimerman is Asst. Mgr.

Pavilion—Cleveland, Ohio—Bids will be received by the Commissioner of Purchases and Supplies, City Hall, until noon, Apr. 28, for the construction of a pavilion in Rockefeller Park. Specifications may be obtained of F. H. Betz, City Arch., 420 City Hall.

✚Stadium—Cincinnati, Ohio—The contract for constructing the stadium at the Cincinnati University has been awarded to the FERRO CONCRETE CONSTRUCTION CO., Cincinnati. This includes the excavation, reinforced-concrete and brick work.

Dredging—Lorain, Ohio—The City Council has voted to spend $16,000 for dredging Black River.

Park Improvements—Zanesville, Ohio—The city will soon hold a special election for the purpose of voting on a bond issue of $26,500, the proceeds to be used for improving parks. John S. Dennis is City Engr.

Levee—Indianapolis, Ind.—Bids will be received by Joseph A. Rink, Pres., Bd. of Pub. Wks., until 10 am., Apr. 26, for constructing a of levee on the west side of the White River. B. J. T. Jeup is City Engr.

✚Dredging—Columbia City, Ind.—The contract for dredging Big Blue Creek Ditch has been awarded to CLYDE A. WALB, Lagrange, and C. J. NESS, Columbia City, at about $32,239.

Fire Apparatus—Terre Haute, Ind.—The city contemplates issuing $25,000 in bonds for the purchase of motor fire apparatus.

✚Ditch—Bloomington, Ill.—The contract for the construction of a drainage ditch in Empire and West Townships has been awarded to the FREDERICK M. CRANE CO., Omaha, Neb., at 0.874c. per cu.yd. The work involves about 142,149 cu.yd. of excavation.

✚Recreation Building—Chicago, Ill.—The contract for constructing a steel trestle and loading platform has been awarded to the KETLER-ELLIOTT CO., Chicago, at $20,700. The lowest bid for constructing the recreation building and shelter was from Paschon Bros., at $415,000. W. O. Johnson is Secy., Harbor and Subway Comn. Noted Apr. 8.

✚Ditch—Lincoln, Ill.—The contract for the construction of the third section of the 7½-mile drainage ditch in Union Drainage District No. 1 has been awarded to ALLAN T. RICE, Springfield, Ill.

✚Dredging—Milwaukee, Wis.—The contract for dredging rivers and canals has been awarded to ARTHUR H. VOGEL, 491 Canal St., Milwaukee, at 0.124c. per cu.yd. Percy Braman is Deputy Comr. of Pub. Wks.

Drainage—Clinton, Iowa—The County Board of Supervisors has voted to construct a drainage system, about 17 miles long. Estimated cost, $100,000.

✚Ditches—Nevada, Iowa—Contracts have been awarded by the County Board of Supervisors for constructing ditches, as follows: New Albany ditch No. 68 to SARGENT DITCHER CO., Fort Dodge, at $20,572; Indian Creek ditch No. 66 to HAWKEYE CONSTRUCTION CO., Webster City, at $5116 for tile, and H. L. BROWN, Maxwell, for laying same, at $1674.

★Concrete Dam and Bulkhead—Waverly, Iowa—(Official)—Bids will be received by H. R. Van Derveer, City Clk., until 5 p.m., Apr. 27, for the construction of a concrete dam and bulkhead across Cedar River at Waverly.

Ditch—St. James, Minn.—It is reported that bids will be received by J. C. Jensen, County Audr., until Apr. 30 for constructing Judicial Ditch No. 9 in Watonwan and Martin Counties.

Concrete Work—St. Paul, Minn.—Bids will be received until 10:30 a.m., Apr. 26, by August Hoenstein for concrete work on Harriet Island.

Subway—Kansas City, Mo.—An election will be held on May 25 for the purpose of issuing $15,000 in bonds for constructing a subway under the Robert Gillbain Rd. H. L. Yost is Mayor.

Ditch—New Madrid, Mo.—Bids will be received by Felix M. Robbins, Engr., Drainage Dist. No. 30, until Apr. 27 for the construction of a ditch in that district. J. L. Ransburgh is County Clk.

Drainage—Crawfordsville, Ark.—The Commissioners of Drainage District No. 3 have decided to issue $250,000 in bonds for drainage work. W. W. Swepston is Chn.

Wharves and Docks—Beaumont, Tex.—An election will be held on May 20 for the purpose of voting on the issue of $100,000 in bonds for the improvement and construction of wharves and docks.

Drainage—Richmond, Tex.—The State Attorney-General has approved of issuing $61,000 in bonds for Drainage District No. 1.

Pavillion and Bathhouses—Mineral Wells, Tex.—The Mineral Wells Water Co. has had plans prepared by H. L. Spicer, 1032 Stella St., Fort Worth, for the construction of drinking pavillion and bathhouses. The estimated cost is $11,000.

Ditch—Mt. Vernon, Wash.—The Commissioners of Skagit County are considering the establishment of a drainage district to provide for main open ditch 4 to 8 ft. wide, with wood flume outlet or spillway; lateral ditch to consist of 8-, 12- and 15-in. No. 2 vitrified clay sewer pipe and an open ditch 2 ft. wide.

Ferry Approach, Building—Seattle Wash.—Plans for a West Seattle ferry approach, waiting station and warehouse at the foot of Marion St. have been prepared. The approach will cost about $20,000 and the building about $30,000. Bids for both improvements will be received by the Seattle Port Commission. C. E. Remsberg is Secy.

Derrick and Hoist—Seattle, Wash.—Bids will be received by C. E. Remsberg, Secy., Port Comn., for furnishing a 100-ton leg derrick; also an electric hoist for the same.

Concrete Snow Sheds—Tye, Wash.—(Wellington post office)—Press reports state that the Great Northern R.R. will construct 1200 lin.ft. of concrete snow sheds between Tye and Embryo. About $250,000 has been appropriated for the work. P. H. McFadden, Seattle, is Asst. Engr.

Embankment—Portland, Ore.—Bids will be received until Apr. 26 by the Interstate Bridge Commission for constructing about 560,000 cu.yd. of embankment. This work is in connection with the construction of the Interstate bridge.

Lock Machinery, Etc.—Ottawa, Ont.—Bids will be received until May 5 by the Department of Railways and Canals, for furnishing lock machinery, fittings, valves, etc., for the Trent Canal.

✚Rock—Andrade, Calif.—The contract for delivering about 8000 cu.yd. of rock on the levee below Andrade has been awarded to E. F. SANGUINETTE, Yuma, Ariz.

✚Market Improvement—New Westminster, B. C.—The contract for sinking piles and constructing decks in connection with the market on 10th St. has been awarded by the City Council to the DOMINION CONSTRUCTION CO., New Westminster, at $22,053.

BUILDINGS

Other items relative to Building Construction will be found under the following headings: "Industrial Works:" "Federal Government Work" and "Miscellaneous."

✚Bangor, Maine—The OTTO NELSON CO., Bangor, has been awarded the contract for the construction of a bank building. Estimated cost, $40,000.

✚Manchester, N. H.—The contract for the construction of a department store has been awarded to KENNEDY & PETERSON CONSTRUCTION CO., 7 Water St., Boston, Mass. Estimated cost, $200,000. Hutchins & French, 808 Amoskeag Bank Bldg., Manchester, is Arch.

✚Manchester, N. H.—The J. H. MENDELL CO., Manchester, has been awarded the contract for the construction of a building for the Manchester Institute of Arts and Sciences. William G. Rantoul, 6 Beacon St., Boston, Mass., is Arch. The estimated cost is $175,000.

✚Boston, Mass.—The contract for the construction of a seven-story building to be known as the Morgan Memorial on Shawmut Ave. has been awarded to WALTER A. WENTWORTH CO., 50 Exchange Pl., Boston. Estimated cost, $100,000.

✚Boston, Mass.—The contract for the construction of a building on Neponset Ave., Dorchester District, for St. Ann's Church has been awarded to ARCHDEACON & SULLIVAN, 5 East Concord St., Boston. Estimated cost, $45,000.

✚Brockton, Mass.—The contract for the construction of a school on Crescent St. has been awarded to HARRY C. BRIGGS, Brockton. Estimated cost, $78,000. Noted Nov. 5.

✚Middletown, Mass.—The contract for the construction of a building for the Central National Bank has been awarded to C. O. STONE & SONS, Middletown. Estimated cost, $125,000.

Worcester, Mass.—Bids will be received until noon, May 3, by George C. Halcott, Supt. of Public Bldgs., Room 35, City Hall, for the construction of an addition to the North High School. Estimated cost, $190,000. Noted Oct. 29, Jan. 21 and Apr. 15.

✚Amityville, N. Y.—The contract for the construction of a two-story, 45x103-ft. building for the Long Island Home has been awarded to E. W. HOWELL, George St., Babylon. Estimated cost, $40,000,

Binghamton, N. Y.—The St. John Evangelist Church, 265 Vestal Ave., will construct a building, to cost between $75,000 and $80,000. James B. Green is Pastor.

✚Buffalo, N. Y.—JOHN LANNEN & SON, Prudential Bldg., Buffalo, has been awarded the contract for the construction of a three-story, 50x207-ft. club house at 500 Delaware Ave. for the Knights of Columbus. Estimated cost, $80,000. Noted Feb. 25.

✚New Rochelle, N. Y.—The contract for the construction of additions to the hospital on Guion St. for the New Rochelle Hospital Association has been awarded to E. E. PAUL CO., 101 Park Ave., New York. Estimated cost, $45,000. Noted Dec. 3 and Mar. 11.

New York, N. Y.—(Borough of Brooklyn)—Plans have been prepared by M. A. Cantor, 373 Fulton St., for the construction of a four-story, 100x175-ft. loft building on Atlantic Ave. and Elton St. for Nass & Berg, 405 Van Sicklen Ave. Estimated cost, $50,000.

New York, N. Y.—(Borough of Brooklyn)—Glynne & Ward, Halsey St. and Knickerbocker Ave., plans to construct a one-story, 82x122-ft. motion picture theater at Robinson St. and Nostrand Ave. The estimated cost is $50,000.

✚New York, N. Y.—(Borough of Brooklyn)—The contract for the construction of a three-story building at Bond and Wyckoff St. for Mrs. C. Zabriskie has been awarded to the WILLIAM L. CROW CONSTRUCTION CO., 103 Park Ave., New York. Estimated cost, $50,000.

New York, N. Y.—(Borough of Manhattan)—F. E. Townsend, Arch., 103 Park Ave., has prepared plans for the construction of a 12-story, 54x120-ft. store and office building at 278 Madison Ave., for Lilla B. Hyde, 437 Fifth Ave. Estimated cost, $285,000.

New York, N. Y.—(Borough of Manhattan)—Edward W. Browning, 110 West 40th St., plans to construct a 13-story fireproof hotel at 31 West 71st St. Estimated cost, $90,000. Robert T. Lyons, Inc., 110 West 40th St., is Arch.

New York, N. Y.—(Borough of Manhattan)—Bids are being received by Bertram S. Goodhue, Arch., 2 West 47th St., for the construction of a building at Lexington Ave. and 66th St. for the Church of St. Vincent de Ferrer. Estimated cost, $500,000.

New York, N. Y.—(Borough of Manhattan)—George & Edward Blum, Arch., 505 Fifth Ave., is preparing plans for the construction of a 12-story store and loft building at Fifth Ave. and 31st St. for Harry Falk and Joseph Falk, 3785 Broadway.

✚New York, N. Y.—(Borough of Manhattan)—The contract for the construction of a 16-story, 105x116-ft. store and loft building at Broadway and 26th St. for the Estate of Frederick Ayer, 141 Milk St., Boston, Mass., has been awarded to CHARLES A. COWEN & CO., 1123 Broadway. Estimated cost, $800,000.

New York, N. Y.—(Borough of Manhattan)—Herman Lee Meader, Arch., 2 West 32d St., has prepared plans for the construction of a 12-story loft and office building at 138 West 32d St. for the Pennlane Realty Co. Joseph Brewster, 165 Broadway, is interested.

New York, N. Y.—(Borough of Manhattan)—Emery Roth, Arch., 405 Lexington Ave., is preparing plans for the construction of a 13-story, 40x80-ft. apartment house at West End Ave. and 89th St. for the 601 West End Ave. Co. Albert Saxe, 525 West End Ave., is Pres.

New York, N. Y.—(Borough of Manhattan)—Plans are being prepared by Schwartz & Gross, Arch., 347 Fifth Ave., for the construction of a 12-story store and loft building at 30th St. near Broadway for Moses Crystal, 37 East 28th St.

New York, N. Y.—(Borough of Queens)—The Bank of Long Island plans to construct a one-story building on the Queensboro Bridge Plaza between Jackson and Hunter Ave. Estimated cost, $50,000.

New York, N. Y.—(Borough of Richmond)—(Official)—Bids will be received by C. B. J. Snyder, Supt. Dept. of Education, Park Ave. and 59th St., Borough of Manhattan, until 11 a.m., Apr. 26, for the general construction of a school on Lindenwood Ave. and School St.

✚Rochester, N. Y.—The contract for the construction of an eight-story building at Elm and Chestnut St., for the Fine Art Building Corporation, has been awarded to F. L. GREENO & CO., 33 Exchange St., Rochester. Estimated cost, $65,000.

White Plains, N. Y.—Plans are being prepared by Benjamin W. Morris, Arch., 101 Park Ave., New York, for the construction of an addition to the Westchester County Courthouse. The estimated cost is $1,000,000. Noted Dec. 17.

✚Atlantic City, N. J.—Bids will soon be received for the construction of a seven-story addition to the Hotel Strand, Pennsylvania and Beach Ave. The estimated cost is $200,000. Lloyd Titus is Arch. The EASTERN STEEL CO., Pottsville, Penn., has been awarded the contract for 275 tons of steel. Noted Apr. 1.

Atlantic City, N. J.—(Official)—Bids will be received about June 1 by H. A. Stout, Arch., for the construction of the Brighton Ave. School. Estimated cost, $117,000. Noted Apr. 15,

Cliffside Park, N. J.—(Cliffside post office)—Bids will be received until 8:30 p.m., Apr. 28, by the Board of Elucation for the construction of a school. The estimated cost is $42,000. Noted Mar. 11.

Elizabeth, N. J.—C. Goodfrey Poggi, Arch., 2 Julian Pl., is preparing plans for the construction of a two-story school for the Board of Education. Estimated cost, $52,000. Walter B. Timms is Pres.

Jersey City, N. J.—St. Mary's Parish will construct a four-story, 95x147-ft. parochial school on Third St.

Jersey City, N. J.—The Board of Education plans to construct a school in the Greenville section of Jersey City.

Millville, N. J.—(Official)—Bids recently received for the construction of a $70,000 school have been rejected by the Board of Education. New bids were received Apr. 21 by Arnold H. Moses, Arch., 136 South Fourth St., Philadelphia, Penn. Noted July 30, Sept. 10 and Apr. 1.

✚Montclair, N. J.—The contract for the construction of a one-story building at 493 Bloomfield Ave. for the Essex National Bank has been awarded to A. P. CLARK, 264 Claremont Ave., Montclair. Estimated cost, $45,000. Noted Mar. 18.

✚Newark, N. J.—The contract for the construction of a one-story, 90x100-ft. motion picture theater on North Seventh near Orange St., for Edward W. McDonough, 207 Market St., has been awarded to the ESSEX CONSTRUCTION CO., 87 Academy St., Newark. Estimated cost, $60,000. Noted Feb. 18.

Newark, N. J.—The Public Service Newark Terminal R.R. Co. has made application to the Board of Public Utility Commissioners for permission to issue bonds for $5,000,000 and stock for $8,300,000, the proceeds to be used for the construction of its local terminal building with connecting tracks.

✚New Brunswick, N. J.—JOHN LOWRY, JR., 235 Fifth Ave., New York, N. Y., at $142,885, has been awarded the contract for the construction of a high school. Noted Dec. 3, Jan. 28 and Mar. 18.

North Bergen, N. J.—Plans are being prepared for the construction of School No. 6. The estimated cost is $165,000.

Perth Amboy, N. J.—Preliminary plans are being prepared for the construction of an addition to School No. 9 in the Budapest District. The estimated cost is $122,000. Noted Apr. 15.

Princeton, N. J.—Work will soon be started on the construction of a group of buildings for Princeton University. The buildings will be used for the study of animal diseases. The estimated cost is $1,000,000. Theobald Smith will be in charge.

✚Union, N. J.—The general contract for the construction of a theater to be known as the New Union Theater at Hackensack Plank Rd. and Bergenline Ave. has been awarded to the DE RISO CONTRACTING CO., 217 Third St., Union, at about $150,000. FAGAN IRON WORKS, Third St., Hoboken, has been awarded the contract for the iron work. Noted Mar. 25.

West New York, N. J.—Plans are being prepared by Carl Goldberg, Arch., 437 Broadway, Bayonne, for the construction of a four-story, 90x120-ft. apartment house at Hudson Ave. and 12th St. for Weisberg & Cadel, Hudson Ave. and 11th St. Estimated cost, $100,000.

Coatesville, Penn.—The lowest bid received for the construction of a three-story, 136x138-ft. fireproof school for the Board of Education was submitted by W. J. Elliott, Coatesville, at $86,985.

Natrona, Penn.—An election will be held about May 10 by the Board of Education to vote on the question of issuing $75,000 in bonds. The proceeds will be used for the construction of a school.

Philadelphia, Penn.—Simon & Bassett, Arch., is revising plans for the construction of a three-story, 122x144-ft. fire and police station at Hunting Park Ave. for the City of Philadelphia.

✚Pittsburgh, Penn.—The contract for the construction of the Shriners' Temple on Grant Blvd. has been awarded to GOLDEN & CRICK, 3512 Fifth Ave., Pittsburgh. Estimated cost, $500,000.

Pittsburgh, Penn.—(Official)—Bids will be received until 3 p.m., Apr. 27, by George W. Gerwig, Secy. of Bd. of Education, for the construction of the Schenley High School, at Grant Blvd. and Center Ave. Edward Stotz, Monongahela Bank Bldg., Pittsburgh, is Arch., and C. L. Wooldridge is Supt. of Bldgs. Noted Oct. 22, Nov. 19 and Apr. 1.

Pittsburgh, Penn.—McMasters & Crooks, Arch., Curry Bldg., is preparing plans for the construction of a building for Allegheny County to be used as a hospital for the insane. The estimated cost is $100,000.

✝West Reading, Penn.—The contract for the construction of a school at West Reading has been awarded to HAUPT & RENTZ, Wyomissing. Estimated cost, $50,000.

Wilmington, Del.—The E. I. Du Pont de Nemours Powder Co. plans to construct an addition to its office building on 11th and Orange St.

✝Baltimore, Md.—The contract for the construction of a two-story building on Fayette near Payson St. for the St. Martin's Day Nursery has been awarded to MONMONIER & SORRELL, 1711 McCulloh St., Baltimore. Estimated cost, $50,000.

Baltimore, Md.—The Grand Lodge of the Knights of Pythias will construct a temple. Estimated cost, $68,000.

Baltimore, Md.—Plans are being prepared by John K. Forsythe, Arch., for the construction of a three-story apartment house for Gilbert & Ridgely. Estimated cost, $50,000.

Washington, D. C.—Plans have been prepared by A. H. Stonneman, Arch., for the construction of a four-story apartment house, on 20th St., for Davidson & Davidson. Estimated cost, $45,000.

Grafton, W. Va.—Bonds to the amount of $110,000 have been sold by the Board of Education. The proceeds will be used for the construction of a high school at Grafton.

✝Charlotte, N. C.—The contract for the construction of a three-story, 40x140-ft. building at East Fifth St. and Monroe Rd. for the Mercy General Hospital has been awarded to W. P. ROSE, Goldsboro. Estimated cost, $50,000.

✝Durham, N. C.—J. A. JONES, Durham, has been awarded the contract for the construction of a building for the First Presbyterian Church. The estimated cost is $80,000. Noted Feb. 4.

✝Greenville, Miss.—AGER & CLINE, Birmingham, Ala., has been awarded the contract for the construction of a high school. Noted Aug. 27.

Bastrop, La.—An election will be held May 12 for the purpose of issuing $55,000 in bonds, the proceeds to be used for the construction of a school.

New Orleans, La.—The City Bank & Trust Co. plans to construct a building at 126 Carondelet St. The estimated cost is $60,000.

✝Lexington, Ky.—The contract for the construction of a 50x750-ft. freight-house for the Louisville & Nashville R.R. has been awarded to T. S. MOODY & CO., Chattanooga, Tenn.

Louisville, Ky.—Brinton B. Davis, Arch., 1909 Inter-Southern Bldg., is preparing plans for the construction of a church for the First Church of Christ, Scientist. Estimated cost, $150,000. J. F. C. Hegewald, 1126 East Breckenridge St., is Chn. of Bldg. Com.

Cleveland, Ohio—The Directors of the Case School of Applied Science, Euclid and Wade Park Ave., plan the construction of a school. Estimated cost, $200,000. Charles S. Howe is Pres.

Cleveland, Ohio—According to press reports C. H. Miles, Pres. of the Miles Theater Co., Pythian Temple, is interested in a project to construct a building for an indoor amusement park or winter circus. The estimated cost is $2,000,000.

Cleveland, Ohio—A. B. Smythe, 601 Swetland Bldg., and J. R. Sprankle, Cleveland, are interested in the construction of a four-story fireproof commercial building at Ontario St. and the Public Sq. The estimated cost is between $75,000 and $100,000.

✝Cleveland, Ohio—The contract for the construction of the 12-story Cuyahoga Hotel at Superior Ave. and East Ninth St., for the Great Lakes Hotel Co., has been awarded to the H. L. STEVENS CO., 910 South Michigan Ave., Chicago, Ill. Estimated cost, $600,000. Jacob Babin, Williamson Bldg., is interested.

Cleveland, Ohio—Max Lees, 1866 East 97th St., plans the construction of a three-story apartment house on East 97th St., near Euclid Ave. Estimated cost, $45,000.

Columbus, Ohio—Bids will be received until noon, Apr. 24, by F. L. Packard, Arch., New Haydon Bldg., for the construction of a school for Elizabeth Township.

Northfield, Ohio—(Official)—All bids received Apr. 12 by G. L. Williams, Clk. of Bd. of Education, for the construction of a school have been rejected. Plans will be revised and new bids received. Noted Apr. 8.

✝Tontogany, Ohio—The general contract for the construction of a school, has been awarded to SERREFF BROS., Lima, at $41,500. Howard & Merriam, 8 East Broad St., Columbus is Arch. Noted Mar. 25.

Zanesville, Ohio—The citizens will vote about May 11 on the question of issuing $300,000 in bonds, the proceeds to be used for the construction of a city hall and market. Noted Dec. 24.

✝Indianapolis, Ind.—The contract for the construction of a building at Central Ave. and 22d St. for the Masonic Temple of Oriental Lodge, F. and A. M., has been awarded to HENRY W. KLAUSMANN, at $60,000. Noted Apr. 1.

Detroit, Mich.—Bids are being received by George H. Fenkell, Comr., City Hall, for the construction of a municipal court building. The estimated cost is $600,000. Smith, Hinchman & Grylls, 710 Washington Arcade Bldg., is Arch. Noted Nov. 5.

Grand Rapids, Mich.—The citizens voted against the issuing of $60,000 in bonds for the construction of an armory and convention hall.

Chicago, Ill.—The Fifteenth Church of Christ, Scientist, plans to construct a church at Central Ave. and Fulton St., Austin. The estimated cost is $125,000.

Chicago, Ill.—A. F. Rusy, Arch., 1607 South Crawford Ave., is preparing plans for the construction of a three-story hospital building for the Bohemian American Hospital Association. Estimated cost, $50,000. L. J. Fisher, 2533 South Central Park Ave., is Chn. of Bldg. Com.

✝Eldena, Ill.—(Official)—W. J. McALPINE, Dixon, at $47,250, has been awarded the contract for the construction of a two-story County Infirmary. Other bids were: Blackhawk Construction Co., $51,316; Gust. Holm, $49,302; P. H. Lorens, $47,289; Schmidt Bros. Construction Co., $49,974; Monmouth Galesburg Construction Co., $53,500; W. M. Allen, Son & Co., $55,798. Morrison H. Vail, Galena St., Dixon, is Arch. Noted Jan. 21.

Jerseyville, Ill.—On Apr. 10, the citizens voted in favor of issuing $79,000 in bonds, the proceeds to be used for the construction of a high school.

Joliet, Ill.—Construction work will be started about May 1 on the seven-story temple for the Knights of Pythias. Estimated cost, $230,000. Noted Dec. 3.

✝Kenosha, Wis.—LUDWIG KLEMM, 1127 Elizabeth St., Kenosha, has been awarded the contract for the construction of a lodge building for the Kenosha Aerie No. 1055, Fraternal Order of Eagles. Noted Feb. 25.

✝Madison, Wis.—The Board of Education has awarded the general contract for the construction of the Lincoln School on East Gorham St. to MORGAN & MORGAN, Madison, at $51,164. Noted Nov. 19 and Feb. 18.

Milwaukee, Wis.—Bids will soon be received by Frank M. Harbach, Secy. of Bd. of School Dir., for the construction of a two-story school on Oklahoma Ave. The estimated cost is $65,000.

✝Racine, Wis.—NELSON & CO., Racine, at $61,528, has been awarded the general contract for the construction of a public school at West Racine. Noted Oct. 29, Jan. 14, Feb. 4 and Apr. 15.

Rice Lake, Wis.—John P. Walsh, and N. W. Bailey, Rice Lake, plan the construction of a three-story hotel, at Main and Marshall St. Estimated cost, $60,000.

✝Stevens Point, Wis.—The general contract for the construction of an addition to St. Joseph's Academy near Stevens Point has been awarded to WAGNER & BAUMAN, Monroe. Estimated cost, $80,000. Noted Mar. 11.

Des Moines, Iowa—The question of issuing $100,000 in bonds for the construction of a school was defeated at a recent election.

Sioux City, Iowa—The Board of County Supervisors has approved the plans prepared by W. L. Steele, Arch., United Bank Bldg., for the construction of the six-story courthouse with a 60x60-ft. tower. Estimated cost, $500,000. Noted Dec. 25, 1913, Jan. 14, 1915 and Feb. 4, 1915.

Crosby, Minn.—The citizens have voted in favor of issuing $150,000 in bonds. The proceeds will be used for the construction of a high school. Noted Mar. 11.

Duluth, Minn.—Plans are being prepared by Vernon J. Price, Arch., for the construction of a five-story apartment on Jefferson St., for W. F. King. Estimated cost, $100,000.

Northfield, Minn.—Work will be started about July 1 on the construction of a dormitory for men at Carleton College. The estimated cost is $100,000. J. G. Kilroy will superintend the construction of the building.

St. Paul, Minn.—The City Realty Investment Co. plans to construct a seven-story mercantile building on Sixth near Jackson St. Estimated cost, $125,000.

Independence, Kan.—Plans prepared by Rose & Peterson, Barker Bldg., Kansas City, Kan., have been accepted for the construction of a two-story, 72x94-ft. city hall. Noted Oct. 1.

Omaha, Neb.—An election will be held May 4 to vote on the question of issuing $1,000,000 in bonds, the proceeds to be used for the construction of schools.

Livingston, Mont.—The B. P. O. E. plans to construct a lodge building at Second and Lewis St. Estimated cost, $60,000. Harry B. Blair is Secy. and Lewis Terwilliger is Treas.

✝Austin, Tex.—George W. Littlefield has awarded the contract for the construction of a 10-story annex to the bank and office building to REINHART & DONOVAN, Oklahoma, Okla., at $96,672. Noted Mar. 11.

✝Dallas, Tex.—The contract for the construction of the three-story City Temple of the Central Presbyterian Church at Akard and Bullington St. and Patterson Ave. has been awarded to BUCHANAN & GUILDER, Dallas. Estimated cost, $200,000. Noted Aug. 27.

Fort Worth, Tex.—J. A. Ingram has had plans prepared for the construction of a seven-story hotel on Main St. between 10th and 11th St. Estimated cost, $500,000.

San Angelo, Tex.—(Official)—Bids will soon be received by H. M. Gorden, City Engr., for the construction of a high School. Estimated cost, $75,000. S. H. Jenkins is City Secy. Noted Mar. 11 and Apr. 8.

Colorado Springs, Colo.—Bids will be received about May 1 for the construction of a $50,000 hospital for the Modern Woodmen of America. MacLaren & Thomas is Arch. Noted Feb. 25.

Burley, Idaho—A bond issue of $59,000 has been voted on by the citizens, the proceeds will be used for the construction of a school.

Ogden, Utah—The Ogden Aerie of Eagles plans to construct a clubhouse at 25th St. and Grant Ave. Estimated cost, $75,000.

Mt. Vernon, Wash.—Bids will be received about June 15 for the construction of a three-story, 90x120-ft. high school. The estimated cost is $60,000. Stephen & Stephen, New York Block, Seattle, is Arch.

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RAPID TRANSIT SYSTEM, NEW YORK, N. Y.

Section 4, Routes 4 and 36

Bids were received Apr. 9 by the Public Service Commission for the First District, for the construction of Section 4, Routes 4 and 36, a part of the Broadway-Fourth Ave. Rapid Transit Railway, from: (A) Litchfield Construction Co.; (B) Rodgers & Hagerty, Inc.; (C) T. A. Gillespie Co.; (D) Degnon Contracting Co.; (E) Mason & Hanger Co.; (F) J. F. Cogan Co.; (G) Oscar Daniels Co.; (H) Godwin Construction Co.; (I) Inter-Continental Construction Corporation; (J) Norton & Gorman Contracting Co.; (K) Smith, Hauser & MacIsaac, Inc.; (L) E. E. Smith Contracting Co.; (M) Underpinning & Foundation Co. The item bids were as follows:

Rapid Transit System, New York, N. Y.—Section 4, Routes 4 and 36.	A	B	C	D	E	F	G	H	I	J	K	L	M
98,700 cu.yd. earth excavation above mean high water	$3.19	$2.00	$4.75	$4.00	$4.80	$4.00	$3.50	$5.10	$5.00	$3.77	$5.20	$4.50	$5.80
2600 cu.yd. earth excavation for sewers, pipes, ducts, etc.	3.19	2.00	4.75	4.00	4.80	4.00	3.50	5.10	5.00	3.77	5.20	4.50	5.80
153,500 cu.yd. rock excavation	4.90	6.00	4.75	4.50	4.80	5.00	6.20	5.10	5.00	6.30	5.20	6.00	5.80
3700 cu.yd. rock excavation for sewers, pipes, ducts, etc.	4.90	6.00	4.75	4.50	4.80	6.00	6.20	5.10	5.00	6.30	7.50	7.00	5.80
1100 lin.fr.ft. maintaining, protecting, securing and underpinning	20.00	10.00	60.00	40.00	35.00	40.00	15.00	18.00	35.00	10.00	40.00	48.00	150.00
Supporting and permanent underpinning Central Park apartments (lump sum)	5000.00	36,000.00	2000.00	40,000.00	5000.00	25,000.00	17,000.00	3000.00	30,000.00	500..00	15,000.00	17,500.00	33,000.00
30 lin.ft. restoring Central Park stone wall fence	10.00	5.00	12.50	50.00	15.00	20.00	25.00	20.00	5.00	20.00	50.00	6.00	10.00
2200 cu.yd. tunnel excavation	7.00	10.00	8.00	10.00	9.00	10.00	9.00	12.00	8.00	11.00	9.00	9.00	10.00
31,200 cu.yd. concrete masonry	7.50	9.00	8.50	9.30	9.00	10.00	8.50	9.00	10.00	8.50	8.80	9.00	8.00
3740 cu.yd. protective concrete	7.50	9.00	8.50	9.30	9.00	10.00	8.50	9.00	8.00	8.50	8.80	8.00	8.00
3000 cu.yd. rubble stone masonry	8.00	3.00	4.00	8.00	6.00	5.00	8.00	6.00	7.00	7.75	8.00	7.50	7.00
50 cu.yd. dry rubble stone masonry	6.00	3.00	3.00	7.00	3.50	4.00	3.50	5.50	4.00	6.50	8.00	5.00	6.50
100 cu.yd. brick masonry	20.00	15.00	15.00	15.00	15.00	12.00	16.00	15.00	20.00	18.00	20.00	15.00	20.00
50 cu.yd. hollow terra-cotta masonry	15.00	15.00	15.00	15.00	15.00	12.00	16.00	30.00	15.00	18.00	15.00	15.00	20.00
2000 bbl. grout of portland cement	4.00	3.00	2.85	1.50	2.50	2.50	2.50	3.50	4.00	4.10	3.75	2.50	3.00
1000 lin.ft. timber piles	0.40	0.25	0.40	0.20	0.50	0.20	0.20	0.25	0.50	0.25	1.00	0.25	0.30
2 M ft. b.m. timber foundations	50.00	50.00	45.00	50.00	60.00	50.00	55.00	60.00	50.00	30.00	100.00	30.00	50.00
100 cu.yd. broken stone or gravel	2.00	2.50	1.50	2.50	2.50	2.00	2.00	3.50	2.50	2.75	3.50	2.00	3.00
4900 sq.yd. waterproofing, 1-ply	0.30	0.35	0.40	0.50	0.45	0.40	0.40	0.50	0.40	0.53	0.60	0.50	0.50
100 sq.yd. waterproofing, 2-ply	0.50	0.60	0.65	0.75	0.60	0.50	0.80	0.60	0.60	0.76	0.90	0.80	0.85
24,700 sq.yd. waterproofing, 3-ply	0.70	0.75	1.00	1.10	0.95	0.90	1.00	0.80	0.80	0.95	0.90	1.10	1.20
100 sq.yd. waterproofing, 4-ply	0.90	1.25	1.25	1.45	1.20	1.00	1.35	1.00	1.10	1.15	1.25	1.40	1.55
100 sq.yd. waterproofing, 5-ply	1.10	1.50	1.50	1.75	1.50	1.10	1.70	1.20	1.25	1.55	1.50	1.70	1.90
1500 sq.yd. waterproofing, 6-ply	1.30	2.00	1.90	2.00	1.80	1.40	2.00	1.50	1.50	1.90	2.00	2.00	2.25
100 sq.yd. waterproofing, dry ply	0.20	0.35	0.30	0.40	0.30	0.30	0.40	0.35	0.30	0.50	0.60	0.50	0.45
660 cu.yd. brick in asphalt mastic	25.00	25.00	20.00	25.00	25.00	20.00	25.00	25.00	25.00	29.00	25.00	18.00	20.00
100 lin.ft. 12-in. vitrified pipe	0.60	0.75	0.75	0.80	0.90	0.75	1.00	1.00	1.00	1.10	2.50	1.00	1.20
100 lin.ft. 10-in. vitrified pipe	0.50	0.65	0.55	0.55	0.80	0.60	0.85	0.80	0.75	0.85	1.50	0.85	1.00
5150 lin.ft. 8-in. vitrified pipe	0.40	0.50	0.45	0.30	0.60	0.50	0.70	0.60	0.70	0.72	1.00	0.75	0.80
100 lin.ft. 6-in. vitrified pipe	0.30	0.45	0.40	0.25	0.40	0.40	0.60	0.40	0.50	0.50	0.80	0.65	0.60
100 lin.ft. 4-in. vitrified pipe	0.20	0.40	0.30	0.20	0.30	0.35	0.60	0.30	0.40	0.40	0.80	0.55	0.50
100 lin.ft. 6-in. c.i. pipe	1.20	1.00	0.75	1.00	1.25	1.00	0.90	1.50	1.50	1.40	2.00	2.00	1.20
4740 lin.ft. 4-in. c.i. pipe	0.75	0.50	0.55	1.00	0.80	0.75	0.60	1.00	1.00	0.85	0.80	1.50	1.00
25 lin.ft. 10-in. c.i. pipe	1.50	1.75	1.50	1.50	2.00	2.50	1.80	2.00	2.40	2.50	5.00	5.00	2.00
50 lin.ft. 3-in. extra heavy c.i. pipes, specials and fittings	0.50	1.00	0.60	1.00	0.90	1.00	0.60	1.00	1.00	0.90	1.25	1.00	0.60
100 lin.ft. 4-in. extra heavy c.i. pipes, specials and fittings	0.70	1.25	0.75	1.00	1.00	1.25	0.60	1.50	1.25	1.10	1.50	1.50	0.80
180 lin.ft. 6-in. extra heavy c.i. pipes, specials and fittings	1.25	1.50	1.00	1.50	1.50	1.75	1.00	2.00	1.50	1.60	2.00	2.00	1.20
150 lin.ft. 8-in. extra heavy c.i. pipes, specials and fittings	1.75	2.50	1.30	1.75	2.00	2.00	1.40	2.50	2.00	2.25	3.00	3.00	1.60
156,330 duct ft. tunnel ducts	0.10	0.11	0.12	0.10	0.10	0.10	0.095	0.10	0.10	0.10	0.10	0.10	0.12
22,100 duct ft. railroad ducts	0.10	0.15	0.12	0.15	0.14	0.15	0.13	0.15	0.12	0.25	0.15	0.15	0.20
2510 tons riveted steel	60.00	63.00	60.00	64.00	67.00	65.00	60.00	70.00	66.50	70.00	65.00	70.00	60.00
2350 tons steel beams and shapes	55.00	57.00	55.00	54.00	59.00	55.00	56.00	60.00	60.00	62.00	60.00	60.00	60.00
150 tons steel rods and bars	55.00	60.00	50.00	50.00	60.00	55.00	60.00	60.00	60.00	58.00	65.00	60.00	60.00
27 tons miscellaneous iron castings	50.00	70.00	50.00	50.00	65.00	70.00	65.00	70.00	60.00	72.00	100.00	75.00	80.00
6 tons miscellaneous sewer furnishings	50.00	100.00	50.00	50.00	70.00	70.00	70.00	80.00	60.00	70.00	100.00	75.00	80.00
1000 lb. special wire forms	0.03	0.10	0.15	0.10	0.10	0.10	0.11	0.15	0.10	0.15	0.12	0.20	0.25
2980 lin.ft. 1½-in. oak or ash handrail	1.00	0.45	0.50	0.75	0.40	0.90	0.25	0.20	1.00	0.60	0.50	0.50	0.40
7840 sq.ft. steel gratings	1.40	1.50	1.50	1.00	1.60	1.75	1.50	1.25	1.60	1.25	1.50	1.50	1.00
5000 sq.ft. vault light	1.25	1.50	1.80	1.00	1.50	2.00	0.90	1.25	1.40	1.40	1.50	1.50	1.00
5250 sq.yd. street surface restored within curb lines	2.00	1.50	2.00	2.00	2.00	2.50	2.50	1.50	1.50	1.25	3.00	2.00	2.00
15,140 sq.yd. street surface restored with asphalt	2.50	2.00	2.00	2.50	2.75	2.50	3.00	2.50	2.00	1.80	3.75	2.50	2.00
350 sq.yd. street surface restored granite block	2.50	2.50	2.50	3.50	2.75	2.25	1.60	2.50	2.50	2.75	3.00	2.50	2.00
290 sq.yd. street surface restored asphalt block	2.50	2.50	2.50	3.50	3.00	3.00	3.50	3.00	2.50	2.80	3.00	3.00	2.00
100 lin.ft. street surface restored new blue stone curb	1.00	1.50	1.00	1.50	1.00	1.40	1.00	1.50	1.00	1.25	2.00	1.50	1.50
2760 sq.yd. street surface restored wooden block	3.00	3.00	2.50	3.50	3.00	3.60	1.00	2.50	2.00	3.50	4.00	3.50	3.00
100 lin.ft. street surface restored with 8-in. granite curb	2.00	2.00	1.00	1.50	1.20	1.50	1.20	2.50	1.00	2.45	3.00	2.50	2.20
840 sq.yd. park surface restored	0.25	1.00	2.00	2.00	2.00	2.00	2.25	1.50	0.75	1.25	2.00	2.50	1.00
4500 lin.ft. w.i. electric conduits, ¾-in.	0.15	0.15	0.20	0.25	0.15	0.25	0.15	0.25	0.30	0.22	0.20	0.30	0.20
200 lin.ft. w.i. electric conduits, 1¼-in.	0.30	0.25	0.40	0.40	0.30	0.40	0.30	0.40	0.40	0.40	0.40	0.50	0.40
250 lin.ft. w.i. electric conduits, 2-in.	0.40	0.30	0.55	0.60	0.40	0.50	0.40	0.60	0.60	0.48	0.50	0.75	0.50
2400 lin.ft. w.i. electric conduits, 1-in.	0.20	0.20	0.25	0.30	0.25	0.30	0.20	0.30	0.35	0.30	0.30	0.40	0.30
510 c.i. outlet boxes	0.50	1.00	0.70	1.00	1.00	1.00	1.00	1.00	1.00	1.15	1.50	1.00	1.50
150 lin.ft. extra heavy c.i. pipes and fittings, 6-in	1.00	1.50	0.90	1.50	1.50	1.50	1.50	1.50	1.50	1.85	2.00	2.00	1.50
120 lin.ft. extra heavy c.i. pipes and fittings, 3-in	0.75	1.00	0.50	1.00	0.90	1.00	1.00	1.00	1.00	1.00	1.50	1.00	1.00
710 lin.ft. 12-in. vitrified pipe sewer	1.25	2.40	1.50	3.50	3.50	3.75	2.50	2.50	4.00	2.00	2.00	3.00	4.00
1020 lin.ft. 15-in. vitrified pipe sewer	2.00	2.75	2.00	4.00	4.00	4.25	3.00	3.00	5.00	2 90	2.50	3.50	5.00
160 lin.ft. 18-in. vitrified pipe sewer	2.50	3.25	2.50	4.50	4.60	4.75	3.50	3.50	6.00	4.05	3.00	4.00	6.00
1300 lin.ft. 20-in. vitrified pipe sewer	2.75	4.00	2.85	5.00	5.00	5.50	4.00	4.00	6.50	4.80	3.50	4.50	7.00
100 lin.ft. 22-in. vitrified pipe sewer	3.00	4.50	3.50	5.50	5.70	5.75	4.25	4.50	7.00	5.10	4.00	5.00	8.00
450 lin.ft. 24-in. vitrified pipe sewer	3.25	5.00	4.10	6.00	6.00	6.25	4.70	5.00	7.00	6.05	4.00	5.50	9.00
47 tons c.i. sewer pipe	40.00	40.00	40.00	60.00	45.00	45.00	40.00	60.00	60.00	52.00	50.00	40.00	50.00
23 tons c.i. sewer pipe special castings	75.00	75.00	80.00	90.00	70.00	75.00	70.00	80.00	100.00	81.00	100.00	80.00	100.00
130 lin.ft. 3 ft. 6 in. x 2 ft. 4 in. egg shaped brick or concrete sewer	3.75	6.25	5.00	10.00	7.00	7.00	5.50	9.00	10.00	7.25	15.00	7.50	15.00
140 lin.ft. 4 ft. 0 in. x 2 ft. 8 in. egg shaped brick or concrete sewer	4.65	7.50	6.00	12.00	8.00	8.00	6.50	12.00	11.00	8.75	15.00	9.00	18.00
8340 lin.ft. street surface railroad underground trolley	5.00	10.00	6.00	12.00	7.00	6.00	12.00	8.00	7.50	10.00	15.00	9.00	5.00
4 support elevator R.R. columns partly or wholly off subway	500.00	500.00	500.00	1000.00	800.00	800.00	700.00	750.00	1000.00	910.00	2500.00	800.00	600.00
530 lin.ft. 6-in. water pipe	0.75	0.40	1.00	1.50	0.80	1.00	0.80	1.50	1.00	1.10	1.50	1.20	0.60
210 lin.ft. 12-in. water pipe	1.50	0.75	2.00	2.50	1.50	1.50	1.50	2.00	1.50	1.70	2.50	1.75	1.20
430 lin.ft. 20-in. water pipe	2.50	1.25	2.50	3.50	2.50	2.50	2.25	4.00	3.00	2.70	5.00	3.00	2.00
30 service connections for water pipes	8.00	25.00	20.00	25.00	12.00	20.00	15.00	20.00	25.00	15.00	20.00	15.00	25.00
320 lin.ft. 4-in. c.i. gas pipe	0.50	0.40	1.00	1.00	0.75	0.90	0.75	1.00	0.60	0.60	1.00	1.00	0.50

	A	B	C	D	E	F	G	H	I	J	K	L	M
740 lin.ft. 6-in. c.i. gas pipe	0.75	0.50	1.50	1.25	1.00	1.00	1.00	1.50	1.00	0.85	1.50	1.20	0.75
630 lin.ft. 8-in. c.i. gas pipe	1.00	0.65	2.00	1.50	1.30	1.25	1.30	2.00	1.25	1.20	1.80	1.60	1.00
110 lin.ft. 12-in. c.i. gas pipe	1.50	0.75	2.50	1.75	1.80	1.50	2.00	2.50	1.50	2.00	2.50	2.10	1.50
5860 lin.ft. 8-in. w.i. bypassing pipe upon or below street surface	2.75	2.50	5.00	4.50	3.00	4.00	3.50	5.00	3.00	3.75	4.50	5.00	4.00
210 lin.ft. 8-in. w.i. bypassing pipe on trestle	1.75	2.00	2.75	4.50	3.00	8.00	3.50	6.00	3.00	3.75	5.00	10.00	6.00
210 lin.ft. trestle	3.00	1.50	2.00	2.00	3.00	2.00	5.00	4.00	3.00	3.75	6.00	10.00	5.00
110 lin.ft. 10-in. w.i. gas pipe	1.50	2.00	3.50	1.75	1.70	2.00	1.20	2.00	2.00	1.65	8.00	2.00	10.00
30 service connections for gas pipes	8.00	25.00	15.00	25.00	12.00	20.00	12.00	20.00	15.00	12.00	20.00	25.00	25.00
5 tons new c.i. hub and spigot straight pipe	30.00	35.00	35.00	40.00	35.00	40.00	35.00	50.00	100.00	41.00	60.00	35.00	50.00
50 lin.ft. new 10-in. standard weight w.i. gas pipe	2.00	1.75	3.00	1.75	1.70	2.50	2.50	4.00	1.50	2.25	2.00	2.50	10.00
2 tons new c.i. hub and spigot pipe special castings	50.00	65.00	50.00	60.00	70.00	70.00	70.00	75.00	120.00	73.00	100.00	75.00	100.00
50 lb. new malleable iron fittings for w.i. gas pipe	0.12	0.20	0.10	0.10	0.08	0.10	0.50	0.20	0.10	0.25	1.00	0.25	0.25
110 lin.ft. 8-in. h.p. water pipe	2.00	0.75	2.50	2.00	1.60	2.00	0.30	1.00	1.50	2.10	5.00	2.00	5.00
210 lin.ft. 12-in. h.p. water pipe	3.00	1.00	3.00	2.50	2.50	3.00	0.40	1.50	2.00	2.60	6.00	3.00	7.50
210 lin.ft. 16-in. h.p. water pipe	3.50	1.50	4.00	3.00	3.50	5.00	0.50	2.00	2.50	3.75	8.00	4.00	10.00
110 lin.ft. 20-in. h.p. water pipe	4.00	2.00	5.00	4.00	4.50	6.00	0.60	2.50	3.50	4.30	10.00	5.00	12.00
210 lin.ft. 24-in. h.p. water pipe	5.00	2.50	6.00	5.00	5.50	7.00	0.80	3.00	4.00	5.10	12.00	6.00	15.00
5 tons new c.i. spigot and groove h.p. water pipe	50.00	35.00	40.00	40.00	35.00	40.00	20.00	40.00	40.00	45.00	75.00	35.00	50.00
10 tons new c.i. spigot and groove h.p. special castings	75.00	65.00	50.00	60.00	70.00	75.00	20.00	55.00	60.00	78.00	100.00	75.00	100.00
1030 duct ft. electric ducts and conduits in place	0.35	0.50	0.40	0.50	0.50	0.50	0.25	0.50	0.50	1.25	1.00	0.50	0.60
110 lin.ft. 2½-in. w.i. pipe electric conduits	0.40	0.50	0.25	0.75	0.45	0.60	0.30	0.50	0.50	0.75	0.50	0.50	0.80
5250 lin.ft. 3-in. w.i. pipe electric conduits	0.50	0.50	0.30	0.75	0.50	0.70	0.30	0.70	0.50	1.25	0.90	0.70	0.80
110 lin.ft. 3½-in. w.i. pipe electric conduits	0.65	0.50	0.35	0.75	0.50	0.70	0.30	0.80	0.50	1.50	1.25	0.80	0.80
110 lin.ft. 4-in. w.i. pipe electric conduits	0.75	0.50	0.40	0.75	0.55	0.80	0.30	0.80	1.00	1.90	1.75	0.90	1.00
110 lin.ft. 4½-in. w.i. pipe electric conduits	1.00	0.50	0.45	0.75	0.70	0.90	0.30	1.00	1.00	1.00	1.00	1.50	1.50
210 lin.ft. 2-in. Edison conduits	0.50	1.25	0.20	1.50	0.65	0.50	0.30	1.50	1.00	1.00	1.00	1.50	1.50
210 lin.ft. 2½-in. Edison conduits	0.50	1.25	0.25	1.50	0.80	0.60	0.30	2.00	1.50	1.20	1.20	2.00	1.50
16 service connections for electric conduits	8.00	25.00	10.00	50.00	12.00	20.00	15.00	20.00	25.00	19.00	25.00	25.00	20.00
Extended totals	$1,937,509	$2,089,457	$2,150,064	$2,165,890	$2,217,935	$2,221,561	$2,277,269	$2,298,244	$2,318,778	$2,343,687	$2,442,079	$2,447,695	$2,593,321

†Seattle, Wash.—E. J. ROUNDS CONSTRUCTION CO., Globe Bldg., has been awarded the contract for the construction of a three-story, 60x108-ft. office building at First Ave. and Spring St. for the Puget Mill Co. Estimated cost, $50,000.

†Seattle, Wash.—The contract for the construction of a three-story apartment house for Brown & Cassells has been awarded to the WASHINGTON CONSTRUCTION CO., Seattle. Estimated cost, $60,000.

Tacoma, Wash.—Heath & Gove, Arch., National Realty Bldg., has prepared plans for the construction of a gymnasium at the Stadium High School. Estimated cost, $52,000.

Tacoma, Wash.—Plans have been prepared for the construction of a three-story building at 11th and Market st., for George M. Savage and W. K. Nichols. It will be occupied by the Stone-Fisher Co. The estimated cost is $15,000.

Portland, Ore.—Plans are being prepared by Emil Schacht & Son, Arch., for the construction of a one-story, fireproof commercial building at Ankeny, Pine, Sixth and Fifth St., for the Wilder Bros. Realty Co. Estimated cost, $40,000.

Portland, Ore.—Ellis F. Lawrence and William G. Holford, Assoc. Archs., have prepared plans for the construction of a clubhouse at Thompson and East 22d St. for the Irvington Club. Estimated cost, $80,000.

†Fresno, Calif.—F. M. Rossier has awarded a contract for the construction of a two-story building to J. L. DALY, at $62,400. Noted Dec. 3.

Los Angeles, Calif.—W. S. Garrett, Arch., Currier Bldg., is preparing plans for the construction of a reinforced-concrete hospital building at College and Castelar St. for the French Hospital Association. Estimated cost, $40,000.

Los Angeles, Calif.—The Methodist Mission, 255 East Fifth St., plans to construct a building to cost about $100,000.

Norwalk, Calif.—(Official)—Bids will be received until noon May 4, by W. F. McClure, State Engr., 625 Forum Bldg., Sacramento, for the construction of a group of buildings for the Norwalk State Hospital for the Insane. Estimated cost, $150,000. Noted July 23, Aug. 6 and Apr. 8.

Oakland, Calif.—Bids will soon be received for the construction of a two-story building at Franklin opposite 17th St. for the Native Sons and Daughters of Oakland. Estimated cost, $50,000.

San Fernando, Calif.—Bids will be received until 2 p.m., Apr. 24, by the Board of Trustees of the San Fernando Union High School District for the construction of a group of reinforced-concrete high school buildings. The group will include a two-story, 114x116-ft. auditorium building, a two-story, 96x160-ft. science building, and a one-story, 89x109-ft. mechanical arts building with a boiler plant. The estimated cost is $135,000. Noted Oct. 29 and Mar. 11.

Woodlake, Calif.—Plans have been prepared by F. L. Schwartz, Arch., Fresno, for the construction of a high school. Estimated cost, $40,000.

†Montreal, Que.—The contract for the construction of a public library on Sherbrooke St. E., has been awarded by the Board of Control to JOHN QUINLAN CO. Estimated cost, $445,000. Noted Oct. 29 and Jan. 14.

Hamilton, Ont.—Plans have been prepared for the construction of an addition to the St. Joseph's Hospital on John St. South. The estimated cost is $125,000.

St. Catharines, Ont.—Bids will be received until 5 p.m., May 3, by A. E. Nicholson, Arch., 46 Queen St., for the construction of a building for the Collegiate Institute.

CATALOG NOTICES

Hersey Mfg. Co., E and 2d St., South Boston, Mass. Catalog. Water meters. Illustrated, 46 pp., 6x9 in.

Art Metal Construction Co., Jamestown, N. Y. Catalog No. 757. Steel filing cabinets and office furniture. Illustrated, 80 pp., 7½x11 in.

The Atlas Portland Cement Co., 30 Broad St., New York. Pamphlet. Concrete Highway Construction. Illustrated, 36 pp., 6½x9 in.

Asbestos Protected Metal Co., Pittsburgh, Penn. Catalog. Asbestos Protected Metal for roofing and siding. Illustrated, 62 pp., 8x11 in.

Northern Engineering Works, Detroit, Mich. Bulletin No. 33. Air hoists, compressed air jacks, pneumatic cranes, etc. Illustrated, 16 pp., 6x9 in.

Trussed Concrete Steel Co., Youngstown, Ohio. Bulletin. Kahn pressed steel building construction. Illustrated, 20 pp., 8½x11 in.

Biesanz Stone Co., Winona, Minn. Folder. Sand and gravel washer. Illustrated.

Sullivan Machinery Co., Chicago, Ill. Bulletin No. 65C. Diamond core drills. Illustrated, 36 pp., 6x9 in. Bulletin No. 71-A. Air lift pumps. Illustrated, 30 pp., 6x9 in.

Chain Belt Co., Milwaukee, Wis. Catalog No. 60. Concrete mixers, pavers, etc. Illustrated, 64 pp., 7½x9½ in.

Kolesch & Co., 138 Fulton St., New York. Extract from Central Catalog. Surveying instruments. Illustrated, 6x9 in.

Sandusky Portland Cement Co., Sandusky, Ohio. Folder. Medusa waterproofing paste.

Semet-Solvay Co., Syracuse, N. Y. Pamphlet. Solvay granulated calcium chloride. Illustrated, 20 pp., 3½x9 in.

Smooth-On Mfg. Co., Jersey City, N. J. Booklet. Smooth-On motor repair package for leaks in iron and iron cement No. 7 for concrete floors. Illustrated, 14 pp., 3½x6 in.

Hazard Mfg. Co., Wilkes-Barre, Penn. Price List. Oil and gas well wire lines. Illustrated, 12 pp., 3½x6 in.

Knox Motors Co., Springfield, Mass. Circular. Knox tractor, model 35. Illustrated.

Fort Wayne Electric Works (Rock Drill Dept.) Madison, Wis. Bulletin No. 1143. Electric rock drill, type A. Illustrated, 20 pp., 8x10½ in.

The Statistics Bureau, 5 E. 42d St., New York. Catalog. Materials for the graphic presentation of facts. Illustrated, 20 pp., 6x8½ in.

Chicago Pneumatic Tool Co., Fisher Building, Chicago, Ill. Bulletin No. 34-M. Class O steam and power driven compressors. Illustrated, 36 pp., 6x9 in.

Ingersoll-Rand Co., 11 Broadway, New York. Form No. 3015. Portable air compressors. Illustrated, 32 pp., 6x9 in. Form No. 4032. Jackhamer mounting, type JM-6. Illustrated, 4 pp., 6x9 in.

Harbison-Walker Refractories Co., Pittsburgh, Penn. Catalog. Silica, magnesia, chrome and fire clay brick, etc. Illustrated, 160 pp., 4x6½ in.

Van Wie Pump Co., Syracuse, N. Y. Bulletin No. 300. Centrifugal pumps. Illustrated, 8 pp., 7½x10 in.

The Lagonda Mfg. Co., Springfield, Ohio. Catalog W-1. Lagonda locomotive arch tube cleaners. Illustrated, 12 pp., 6x9 in.

The Marion Steam Shovel Co., Marion, Ohio. Catalog No. 92. "Digging and Mixing Clay—One Operation." Illustrated, 30 pp., 5½x8 in.

Railways Accessories Co., the Rookery, Chicago, Ill. Catalog. Wightman mechanically welded rail joint. Illustrated, 32 pp., 5x8 in.

Cleveland Railway Supply Co., Citizens Building, Cleveland, Ohio. Pamphlet. Newhall flangeway guard for highway crossings. Illustrated, 4 pp., 6x9 in. Pamphlet. Newhall guard rail structure. Illustrated, 8 pp., 6x9 in.

American Casting Co., Birmingham, Ala. Catalog. National cast-iron culvert pipe. Illustrated, 24 pp., 6x9 in.

Chalmers & Williams, Inc., Chicago Heights, N. Y. Bulletin, Section T. Modern Crushing Machinery. Illustrated, 16 pp. 7x9 in. Section R. Symons disk crushers. Illustrated, 24 pp., 7x9 in.

The Builders' Iron Foundry, Providence, R. I., announces that it has received orders of importance. One, from the Inland Steel Co., of Indiana Harbor, Ind., calls for an 8-in. Venturi Meter Tube for boiler feed service. The Lackawanna Steel Co. recently placed orders for three 3-in. meters for the measurement of oil, and a 20-in. meter for the measurement of coke-oven gas. Bird & Son, paper manufacturer, ordered a Venturi meter for boiler-feed service.

The Southern Sales Office of the Bucyrus Co. has been moved from Birmingham to New Orleans. E. L. Byron, Southern Sales Mgr., will remain in charge of the Southern territory.

The Pacific Flush-Tank Co. announces its removal to 4241 East Ravenswood Ave., Chicago. The new building will include a laboratory, where the appliances of the company will be exhibited and demonstrated.

The C. W. Hunt Co., Inc., moved its New York offices to the new Adams Express Co. Bldg., 61 Broadway. The company, it will be recalled, is a large manufacturer of coal-handling machinery, conveying machinery, and small motor trucks.

Charles R. Marsh, Secy. of the Society of Constructors of Federal Buildings, Plymouth, Mass., is desirous of securing the names of manufacturers of building materials, so that he may place with them a list of members of the Society. The Society is composed of employees of the Supervising Architect's of the Treasury Department and have to do with the design, construction, equipment and maintenance of the U. S. public buildings.

The Sullivan Machinery Co. announces that after May 1 its Denver, Colo., office will be located in the Equitable Bldg. George W. Blackinton is Mgr.

SEWER SYSTEM, ENTERPRISE, ORE

Bids were received Mar. 22 by the City Council for the construction of a sewer system from: (A) J. H. Childs, La Grande, Ore.; (B) George Gordan, Portland; (C) H. L. Wilson Co., Walla Walla, Wash.; (D) Kennedy Construction Co., Portland; (E) Jacobson Bade, Portland; (F) H. Venske, Enterprise; (G) R. L. Langan, Spokane, Wash.; (H) R. N. Young, Hood River, Ore.; (I) Franklin L. Davis, Portland; (J) Morrison-Knudson, Boise, Idaho. The item bids were as follows:

	A	B	C	D	E	F	G	H	I	J
4870 cu.yd. earth excavation	$0.44	$0.50	$0.43	$0.45	$0.55	$0.55	$0.65	$0.42	$0.05¼	$0.59
4220 cu.yd. gravel excavation	0.62	0.50	0.93	0.75	0.55	0.95	0.77	0.58	0.93½	0.91
4950 lin.ft. 8-in. pipe	0.36	0.35	0.32	0.35	0.45	0.35	0.29½	0.40	0.31	0.35
3215 lin.ft. 10-in. pipe	0.47	0.45	0.42	0.45	0.60	0.45	0.37	0.49	0.39	0.46
2460 lin.ft. 12-in. pipe	0.57	0.55	0.50	0.55	0.75	0.55	0.44½	0.74	0.49	0.57
2980 lin.ft. 15-in. pipe	0.72	0.65	0.67	0.80	0.85	0.90	0.62	1.00	0.71	0.81½
28 8x6 Ys	0.90	1.00	1.30	1.25	2.00	0.90	1.18	0.50	1.03	1.12
16 10x6 Ys	1.20	1.00	1.65	2.00	2.50	1.20	1.48	0.50	1.37	1.50
14 12x6 Ys	1.50	1.00	2.10	2.50	3.00	1.50	1.78	0.60	1.71	2.13
41 manholes	35.00	40.00	35.00	37.00	40.00	48.00	60.00	52.00	40.00	50.00
Tank	1858.00	2700.00	2766.00	2961.00	2000.00	1789.50	2892.60	2785.00	3000.00	2649.50
Extended totals	$14,958	$15,412	$16,472	$16,853	$17,312	$17, 725	$17,446	$17,796	$17,945	$18,540

IMPROVEMENT OF FURNACE BROOK PARKWAY, QUINCY, MASS.

✚Bids were received Mar. 22 for building to sub-grade, Furnace Brook Parkway from Quincy Shore Reservation to Hancock St., Quincy, from: (A) Jeremiah Sullivan, Cambridge; (B) D. M. Briggs & Co., Boston; (C) George T. Randle Co. and Randle & Stoddard, East Boston; (D) J. P. O'Riordan, Charlestown; (E) Nathan S. Brock, Brookline; (F) Richmond F. Hudson, Melrose; (G) John R. Burke, Boston; (H) Clark & Gore, Dorchester; (I) West Roxbury Trap Rock Co., Roxbury; (J) Middlesex Contracting Co., Framingham; (K) Farrell & Loud, Somerville; (L) Caputo & Giovannini, Boston; (M) A. William & Co., Boston; (N) Antonio G. Tomaselle, Dorchester; (O) Hugh Nawn Contracting Co., Roxbury; (P) H. P. Converse & Co., Boston; (Q) Peter Bompiani & Co., Boston; (R) Dennis F. Crowley, East Milton; (S) Coleman Bros., Boston; (T) Rowe Contracting Co., Boston; (U) James H. Fannon, Somerville; (V) Perini Construction Co., Ashland; (W) JOHN CASHMAN & SONS CO., Boston (awarded contract). The item bids were as follows:

FURNACE BROOK PARKWAY, QUINCY, MASS.

	A	B	C	D	E	F	G	H	I	J	K	L
40,000 cu.yd. earth grading	$0.45	$0.45	$0.43	$0.42	$0.33	$0.40	$0.35	$0.45	$0.40	$0.34	$0.33½	$0.38
100,000 cu.yd. filling, material to be furnished	0.78	0.74	0.64	0.59½	0.68	0.70	0.61	0.65	0.73	0.63	0.59	0.59½
15 M b.m. 2-in. spruce plank	42.00	38.00	70.00	47.00	50.00	35.00	42.00	40.00	30.00	40.00	46.00	40.00
5000 sq.yd. rip-rap paving	3.00	3.00	3.00	3.50	2.50	1.50	3.45	1.50	0.16	2.35	2.80	2.20
Extended totals	$111,630	$107,570	$97,250	$94,505	$94,450	$94,025	$92,880	$91,100	$90,250	$88,950	$87,023	$86,300

	M	N	O	P	Q	R	S	T	U	V	W
40,000 cu.yd. earth grading	$0.39½	$0.40	$0.38	$0.48	$0.47	$0.29	$0.33	$0.30	$0.30	$0.37	$0.23
100,000 cu.yd. filling, material to be furnished	0.58	0.54	0.58	0.48	0.47	0.53	0.48	0.47	0.51	0.41	0.43
15 M b.m. 2-in. spruce plank	30.00	35.00	50.00	50.00	32.00	49.00	45.00	40.00	40.00	40.00	50.00
5000 sq.yd. rip-rap paving	1.75	2.35	1.30	2.18	1.90	2.00	1.80	2.25	1.25	2.12	2.15
Extended totals	$83,000	$82,275	$80,450	$78,850	$75,780	$75,335	$70,875	$70,850	$69,650	$67,000	$63,700

ASHOKAN RESERVOIR, ULSTER COUNTY, NEW YORK
Contract No. 152

✚Bids were received Apr. 13 by the Board of Water Supply, New York, N. Y., for surfacing with vitrified brick block and macadam portions of the highways and constructing guard walls at the Ashokan Reservoir in the towns of Olive, Marbletown and Hurley, Ulster County, from: (A) WINSTON & CO., Brown's Station, (awarded contract); (B) Harris-Rose Construction Corporation, 319 Pearl St., New York; (C) Nordon & Petrillo and James Garofano & Son, Inc., Proctor Bldg., Mt. Vernon; (D) Frawley-Kaufman Contracting Co., Inc., 51 Chambers St., New York; (E) H. B. Sproul Construction Co., Inc., Peekskill; (F) A. L. Guidone & Co., 131 East 23d St., New York; (G) Daniel F. Dunn, 25 Liberty St., New York; (H) De Graff & Hogeboom, Inc., and Zadoc P. Boice, 168 Washington St., Kingston; (I) State Highway Construction Co., Beacon; (J) Ward & Tully, Inc., West 20th St. and Railroad Ave., Brooklyn; (K) Conners Bros. Co., 64 West 88th St., New York; (L) Continental Public Works Co., 2 Rector St., New York; (M) Louis Wechsler, 1133 Broadway, New York. The item bids were as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M
27,000 lin.ft. excavating and grading road (rolling, preparation and shallow excavation)	$0.10	$0.25	$0.15	$0.70	$0.30	$0.30	$0.60	$0.30	$0.40	$0.40	$0.30	$0.66	$1.00
3000 cu.yd. excavating and grading (excavation not included in Item 1)	0.50	0.60	0.40	0.20	0.60	0.25	0.65	0.20	0.50	0.65	0.80	0.60	1.35
4000 cu.yd. broken stone for walks, drains, etc.	1.50	2.50	2.00	1.80	2.50	2.00	2.00	3.36	2.60	1.95	2.90	2.50	3.75
2000 cu.yd. broken stone for macadam surfacing	2.50	3.15	2.90	2.50	3.50	2.49	3.50	3.36	2.80	3.00	3.20	2.60	5.00
6000 cu.yd. concrete masonry for pavement foundations	3.00	3.10	3.50	3.65	3.50	3.12	4.00	3.74	3.83	4.50	3.80	7.50	6.75
3000 cu.yd. concrete masonry for curbs, edgings, etc.	4.00	4.00	5.00	4.15	4.00	4.00	4.25	5.40	6.50	5.20	6.00	10.00	9.50
17,000 bbl. portland cement	1.20	1.85	1.44	2.00	1.35	1.60	1.70	1.55	1.70	1.81	1.64	2.00	1.75
40,000 sq.yd. vitrified brick pavement	1.60	2.11	2.05	1.95	1.90	1.80	1.80	2.00	2.15	2.07	2.20	2.30	3.25
500 lin.ft. vitrified pipe, 8 in. or smaller in diameter	0.50	0.20	0.45	0.25	0.30	0.40	0.30	0.40	0.20	0.33	0.40	0.50	0.20
40,000 lin.ft. stone guard walls	1.40	0.67	1.28	1.00	1.50	1.74	1.60	1.58	1.50	1.67	1.70	1.44	2.55
300 cu.yd. rubble masonry and paving in mortar	4.00	2.50	4.00	1.25	4.50	3.25	4.00	4.30	4.50	3.50	4.50	5.00	10.00
2000 lb. cast iron and steel	0.05	0.05	0.05	0.03	0.05	0.05	0.06	0.10	0.05	0.10	0.07	0.05	0.15
5000 lb. copper	0.40	0.30	0.41	0.50	0.30	0.27	0.24	0.27	0.25	0.45	0.40	0.25	0.35
Extended totals	$189,150	$200,550	$216,305	$221,110	$221,950	$223,975	$237,470	$240,090	$248,480	$253,185	$256,870	$296,520	$392,000